

Beyond the fields:

Ethnographic explorations on notions
and practices of sustainability in
Ifugao, Philippines.

Kathrine Ann Cagat

Thesis submitted for the degree of PhD
2015

Department of Anthropology and Sociology
School of Oriental and African Studies, University of London

Cagat, Kathrine Ann (2015) Beyond the fields : ethnographic explorations on notions and practices of sustainability in Ifugao, Philippines. PhD Thesis. SOAS, University of London

<http://eprints.soas.ac.uk/23666>

Copyright © and Moral Rights for this thesis are retained by the author and/or other copyright owners.

A copy can be downloaded for personal non-commercial research or study, without prior permission or charge.

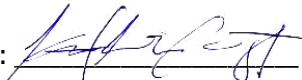
This thesis cannot be reproduced or quoted extensively from without first obtaining permission in writing from the copyright holder/s.

The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the copyright holders.

When referring to this thesis, full bibliographic details including the author, title, awarding institution and date of the thesis must be given e.g. AUTHOR (year of submission) "Full thesis title", name of the School or Department, PhD Thesis, pagination.

DECLARATION FOR PHD THESIS

I have read and understood regulation 17.9 of the Regulations for students of the SOAS, University of London concerning plagiarism. I undertake that all the material presented for examination is my own work and has not been written for me, in whole or in part, by any other person. I also undertake that any quotation or paraphrase from the published or unpublished work of another person has been duly acknowledged in the work which I present for examination.

Signed: _____

Date: 17 November 2015__

ABSTRACT

The thesis explores varying notions and practices of sustainability through a focus on the relationship between management of a heritage site, the Ifugao Rice Terraces and the implementation of the Ambangal Mini-hydro Plant, a small-scale hydro-electric power initiative in Ifugao Province. In doing so, I address the politics of resource governance. Likewise, rather than just a mere translation of ‘sustainability’ in local vernacular or an identification of sustainable practices, I instead elaborate upon how people conceptualise and practice the principles which underpin sustainability. As such, I consider the commonly promoted definition of sustainability as the undertaking of community development without compromising social and natural resources for future generations. Thus, the thesis presents Ifugao conceptualisation and practices regarding stewardship and prosperity. Specifically, I elaborate upon the Ifugao’s kinship system, agricultural activities, and well-being rituals, and relate these practices with how people currently deliberate heritage and development interventions transpiring in the province. The aim is to more explicitly link spiritual and technical activities in anthropological approaches to sustainability.

As the thesis argues, integral to community members’ concern for the well-being of people across generations is the plurality of possibilities, not simply the achievement of particular outcomes or a preoccupation with stability. Thus, I describe local understandings and enactment of sustainability as ‘capacity-expansion’ and discuss this in relation to the often deployed term, ‘capacity-building’ in sustainable development practices. In Ifugao understanding of sustainability, what is particularly salient is how community members articulate issues regarding the linked potential of people and places to arise in multiple possibilities. Therefore, the thesis delves into theoretical approaches in potentiality along with current insights on socio-ecological resilience to expound on what such discussions can contribute to an anthropology of sustainability.

ACKNOWLEDGEMENTS

My gratitude goes out to Dr Kostas Retsikas for his guidance and support throughout my doctoral research. I am also grateful to the following faculty members for additional feedback, support or encouragement: Prof Trevor Marchand, Dr Kit Davis, Prof Johan Pottier and Dr Fabio Gygi. Additionally, I thank Prof Susanne Küchler and Dr Catherine Allerton for the questions and feedback they posed regarding the matter of sustainability discussed in this thesis.

Throughout my thesis, my interlocutors were kept anonymous, in keeping with ethical guidelines; however, I mention the names of some of those individuals in this acknowledgement page. Additionally, there are individuals in my thesis who have not been anonymised, due to the fact that they explicitly expressed wanting to be named, because their names are mentioned in public documents or because I have a familial relationship with them and want my thesis to reflect this. Such individuals are similarly mentioned by name on this page. I thank the Guinid family for welcoming me into their home and family, particularly auntie Doring (my host-mom) for her kindness, patience and generosity.

Many thanks also go out to Marlon for his advice and support throughout my residence in Kiangnan and beyond; Ruel, for his incredible insight and energy. I especially thank the following people: manang Doreen (for being the best neighbour), manang Lyn, manang Esther, manang Lallie, manang Rachel, Jovel, manang Karen, Auntie Maria, manong Nilo, auntie Tabs, manang Maryann and auntie Sabel for their kindness and for acquainting me with the communities of Ifugao. I am also grateful to the SITMo family, especially: Atan, Kenneth, George, Joey, T.A., manong Roland and manang Kathleen. Thanks also go out to the staff members of the National Commission on Indigenous Peoples, Provincial Planning and Development Office and Ifugao Cultural Heritage Office for facilitating my inquiries. I especially thank Engr Carmelita, Ms Nancy N., Mr Jonathan P. and Mr Renato P. My appreciation also goes out to Dr Villia Jefremovas for her hospitality and openness. A debt of gratitude goes out to the community members of Ifugao Province, especially the residents of Kiangnan and Hungduan for graciously welcoming me in their community and home and for kindly giving me their time.

I thank the J. William Fulbright Foreign Scholarship Board for providing much needed funds to my research. In conjunction with Fulbright, I want to thank the Philippine-American Educational Foundation, especially Dr E.C., Con, Yolly and Marge. I am likewise grateful to the University of Philippines Diliman – School of Urban Planning, especially to Prof David Leonides Timbol-Yap and Dean Candido A. Cabrido, Jr. for providing me with institutional support during my fieldwork. Many thanks go out to the members of the 2009 and 2010 SOAS MPhil/PhD cohort for the academic community and camaraderie they provided. I am also grateful to friends especially Linda, Farah, Sonja, Valentino, Cris, Rehaana and Sibilla for giving me much needed assistance and support during the toughest times of this research. I especially thank members of the Alegado, Abut, Cuntapay and Dabalos families, who gave me encouragement and support throughout my stay in Philippines. Thanks also go out to my brothers-in-law Ryan and Jodi who provided constant encouragement and support throughout my writing of this thesis. Lastly, I could not have undertaken this endeavour if it were not for the unconditional love of my parents, Marilyn and Pepe and my sisters, Michelle and Claire.

A NOTE

The thesis is written with British-English spelling; however, when citing American publications I uphold the American-English spelling, so words in quotes will have the American-English spelling. Additionally, there are differences in the way certain Tawali words are spelled across different municipalities. The works of authors who have written on Ifugao and who have conducted research in various Ifugao municipalities reflect such differences. Thus, when quoting the work of these authors I retain the spelling that they use, but I indicate alternative spellings in the footnote.

TABLE OF CONTENTS

ILLUSTRATIONS.....	8
INTRODUCTION	9
CAPACITY-EXPANSION IN IFUGAO: POTENTIALITY AND RESILIENCE.....	15
‘CAPACITY-BUILDING’ IN SUSTAINABLE DEVELOPMENT	22
KIANGAN AND HUNGDUAN	27
METHODOLOGICAL DISCUSSION	32
THESIS STRUCTURE	39
CHAPTER 1: ADAPTABLE PATHS	45
THE HOUSE AND THE FIELD	49
ACCESS AND MOBILITY	58
CHAPTER 2: WELL-BEING MATTERS	67
GOD, DEITIES, SPIRITS AND SOULS	71
ARRANGEMENTS.....	76
OFFERINGS.....	85
REARRANGEMENTS.....	93
CHAPTER 3: CULTIVATING POSSIBILITIES.....	100
LAND AND LABOUR.....	102
(TRANS)PLANTING	112
TOURS AND REVIVALS.....	125
CHAPTER 4: OPEN FIELDS	140
PLANTING TRUST	142
SITES OF NEGOTIATIONS	153
MAINTAINING CHANNELS	161
DYNAMIC CURRENTS.....	170
CHAPTER 5: LOCATION MATTERS	177
A PLAN.....	182
A HIKE	192
A BREAK.....	199
CHAPTER 6: MIXED-VIEWS	208
MONITORING.....	212
MAPPING.....	226
PRESENTING.....	239
CONCLUSION	245
BIBLIOGRAPHY	255

ILLUSTRATIONS

PHOTOS

Photo 2.1: Funeral attendees queuing for the <i>hamul</i>	80
Photo 2.2: Dinner served for a <i>novena</i>	84
Photo 3.1: Pockmarked Pindongan Rice Terraces.....	121
Photo 3.2: Scenes from <i>Gotad ad Kiang</i> an	126
Photo 3.3: Hiking down to Hapao River.....	133
Photo 3.4: <i>Guyuddan</i> at Hapao River	134
Photo 4.1: Ambangal Mini-hydro Plant.....	154
Photo 4.2: The turbine and control panel of the Ambangal Mini-hydro Plant.....	154
Photo 4. 3: Ambangal Mini-hydro Plant civil structures.....	155
Photo 4.4: Headraces for the Ambangal Mini-hydro Plant	167
Photo 4.5 Public transportation	171
Photo 4. 6: Aftermath of Typhoon Pedring and Quiel	173
Photo 5.1: A view of the Hapao Rice Terraces	189
Photo 5.2: Trails to Maggok.....	193
Photo 5.3: Maggok micro-hydro turbine	197
Photo 5.4: Maggok pico-hydro turbine	197
Photo 6.1: Trails along the Nagacadan heritage cluster using the Bilong route	217
Photo 6.2: Scenes from UNESCO Joint Reactive Monitoring Mission	218
Photo 6.3: Provincial mapping forum.....	231

MAPS

Map 1: Cordillera Administrative Region, Philippines	43
Map 2: Map of Ifugao municipalities	43
Map 3: Designated Rice Terraces of the Philippine Cordilleras heritage clusters	44
Map 5.1: Hapao in relation to Poblacion, Banaue and Poblacion, Hungduan	189
Map 5.2: Approximated route from Nagacadan, Kiang	195
Map 6.1: Kiang	228
Map 6.2: Surveying route for mapping Kiang	237

INTRODUCTION

In September 2011, two Category 4 typhoons, Pedring and Quiel, hit Luzon, Philippines within the span of a week. In the aftermath of typhoon Pedring and Quiel, Kiangnan experienced two weeks of power outage and no telecommunications service. In Batad, Banaue multiple rice terraces were destroyed with a mudslide, impacting several households. Actually, mudslides all throughout Banaue, Hingyon and Hungduan, in conjunction with the collapsed Burnay Bridge, isolated the three aforementioned municipalities. For those fortunate enough to possess private vehicles or motorbikes, many motorists circumnavigated the collapsed bridge by driving through an alternative but precarious route running through Mungayang. For residents who regularly took public transportation, but could no longer do so, the only way to travel between municipalities was to hike and climb over the ruins of the bridge.

When the bridge was completely barricaded due to hazardous conditions, what emerged was a strategy established by resourceful community members of a riverside village in Lagawe. These enterprising community members collectively built a raft to cross the Burnay River, charging passengers a nominal fee. Many were willing to cross the river via the community-built raft to procure necessary goods, such as propane gas tanks for cooking or prescription medicine. Within a few days of the community project, a provincial government-sponsored footbridge was built, with assistance from the nearby riverside hamlets. All such strategies developed even before electricity and telecommunication services returned to Ifugao. In the event of the typhoon, the conjuncture between infrastructural and agricultural concerns was made evident, emphasising the link between road and telecommunication networks, electrification and rice-cultivation.

The occurrence of typhoon Pedring and the fraught weeks that followed shed light on the varying capacities of people to respond and deal with the short-term and long-term transformations residents in Ifugao encounter. Typhoon Pedring emphasised matters regarding access and mobility which feature in the daily lives of Ifugao community members¹, even before the typhoon. Yet, what

¹ When I refer specifically to Ifugao practices and cosmologies, I will explicitly state 'Ifugao'. However, when referring to the activities of community members and of the province's residents in general, I will use the term community members. I make this distinction, since although Ifugao

the typhoon illuminated is how the Ifugao negotiate access and mobility not only on a daily basis but amidst extraordinary circumstances. Access and mobility in this case, signifies how people negotiate social and spatial relations, so that social mobility and access to resources is tied to how people engage with the terrain.

In addressing how people engage with issues concerning mobility and access to resources, this thesis explores how community members are adapting to social and environmental transformations. The thesis especially features community members' concern for a multiplicity of pathways towards well-being for themselves and kin across generations. This requires an analysis of the fraught relationship between conservation and development, as the Ifugao grapple with what to change and maintain, and how to do so amidst abrupt or gradual, ongoing transformations. In considering conservation and development matters, the aim of this thesis is to present an anthropological study of sustainability. Rather than just a mere translation of 'sustainability' in local vernacular or an identification of sustainable practices, I instead delve into how people conceptualise and practice the principles which underpin sustainability. In this case, I take on the commonly promoted definition of sustainability as the undertaking of community development without sacrificing social and natural resources for future generations.

As such, this thesis examines Ifugao conceptualization and practices regarding stewardship and prosperity. Specifically, I consider the Ifugao's kinship system, agricultural activities, and well-being rites and relate these practices with how people currently deliberate heritage and development interventions transpiring in the province. Central to community members concern for the well-being of people across generations is the plurality of possibilities, not simply the achievement of particular outcomes or a preoccupation with stability. I describe local understandings and enactment of sustainability as 'capacity-expansion', in contrast to the often deployed term, 'capacity-building' in sustainable development practices. In Ifugao understanding of sustainability, what is particularly salient is how community members articulate issues regarding the linked potential of people and places to arise in multiple possibilities. Therefore, the thesis delves

Province consists predominantly of Ifugao, non-Ifugao also make up the community by way of marriage or migration.

into theoretical approaches in potentiality and current insights on socio-ecological resilience to expound on what such studies can contribute in discourses regarding sustainability. In approaching local understanding of sustainability as 'capacity-expansion', I want to promote a shift away from a preoccupation with an equilibrium-based view of society and the environment (Dove et al, 2011: 17). Rather than focusing on how tensions are resolved and outcomes achieved, my aim is to acknowledge the necessity of debates and contradictions in communities' process of adaption.

An exploration of sustainable development projects concerns decision making processes of various scales. This requires constituting local practices and dynamics within wider context regarding timely global matters. In this way, kinship, local agricultural practices and household concerns are discussed in relation to tourism, heritage management, climate change and transnational development initiatives. In speaking of scales in decision making processes, I likewise address temporal scales and the link between urgent, short-term actions and enduring, but changing practices. In analysing the process of expanding capacities, I particularly draw from theoretical approaches to potentiality in relation to studies on resilience. Resilience in this case, considers the capacity for "systemic renewal and innovation" in social and ecological systems (Buchmann, 2009: 707). I consider how such discussions serve to enlighten the issues of temporality and scale. In focusing on how community members navigate Ifugao systems that I describe as processes of 'capacity-expansion', I argue for the need to approach sustainability as a process that hinges on the stimulation of possibilities, rather than a strategy for achieving social or environmental stability.

In 2011, a small-scale hydropower plant was nearing its one year of operation in Kiangnan, Ifugao. The small-scale plant was connected to the management of the Rice Terraces of the Philippine Cordilleras, or Ifugao Rice Terraces as it is also commonly known. The Ifugao Rice Terraces was deemed a World Heritage Site in 1995 and was listed on the World Heritage in Danger List in 2001. Following the enactment of the Philippines Renewable Energy Act in 2008², a small-scale hydropower plant proposal was endorsed by the Ifugao Provincial Gov-

² According to Philippines' Department of Energy, "This Act shall establish the framework for the accelerated development and advancement of renewable energy resources, and the development of a strategic program to increase its utilization" (Republic Act No. 9513, 2008: s.3)

ernment. That proposal came to be the Ambangal Mini-hydro Power Plant in Kiangnan. The mini-hydro plant's generated power would be sold to the Ifugao Electric Cooperative, and profits from this sale would be invested in the Ifugao Rice Terraces Conservation Fund. The case made for the Ambangal Mini-hydro Plant was that the initiative promotes a "sustainable energy-based development" which addresses the vitalisation of a region, thus improving their capacity for heritage conservation (e8, 2010: 6).

Heritage conservation in this case, is focused on the Ifugao Rice Terraces, which was inscribed in the UNESCO World Heritage List for demonstrating sustainable farming systems and land use. Though, before its recognition as a World Heritage Site by UNESCO, the Ifugao Rice Terraces were acknowledged as a Philippine landmark by the state. According to the 1973 Presidential Decree 260 and 1978 Presidential Decree 1501 of the Marcos administration any alteration or destruction to the landmark could be subject to penalties. Ostensibly, while such policies were in the guise of protecting and maintaining natural resources, they relied on a perspective which saw highland agricultural practices as unchanging. Management and ownership of highland agricultural fields were seen as communal. However, by the 1920s and 30s, America's attempt at political incorporation for the highlands already resulted in the enforcement of land registrations via tax declaration (Sajor, 1998: 161).

In the 1950s and 1960s, prior to the recognition of the terraces as a landmark, practitioners of swidden agriculture were criminalised, with the Philippine government implementing punitive measures, a policy which was pervasive across Southeast Asia. In Philippines, the enforcement of regulations against swidden farming and the resettlements of upland communities were costly or met with resistance. Deforestation also continued to increase, and was at its peak from 1955-1965 (Sajor, 1998: 140). The 1974 Presidential Decree No. 410 and the later Presidential Decree 705 Revised Forestry Code in 1975, became a new direction for land policies in Philippines. Highland dwellers were no longer seen as culprits of deforestation; instead, they were identified as key allies in the conservation and protection of upland resources. Around the same time that the state was crafting key forestry policies, Conklin's ethnography on the shifting cultivation of the Hanunoo in Oriental Mindoro (1957) and his seminal account

of the Ifugao agricultural system (1974), revealed the complexities of agro-ecosystems which involve swidden fields.

In the recognition of the Ifugao landscape as a national landmark, the highland communities of Luzon, Philippines, previously thought of as 'outcasts', were now being acknowledged for their contribution to the enrichment of the state. Communities were being recruited to the implementation of government initiatives tied to conservation. This however, is not the first time when acknowledgement of the rice terraces was highlighted to promote the idea of uniting all residents of the Philippine islands. In fact, while sitting as the president of the Second Philippine Republic under Japanese occupation, Jose Laurel encouraged writers and historians to "explore the pre-Hispanic and late 19th-century nationalist roots of their identity" (Ileto, 2011: 49). Laurel himself drafted an essay titled, 'Forces that Make a Nation Great', which mentions highland rice farmers. Rice cultivators of the Cordillera were thus implicated in nation building, which masked conservation projects under the guise of national heritage.

In the same way, the implementation of the Integrated Social Forestry Program in 1982 is also an attempt at nation-building by way of creating a united Philippine population for the sake of the country's economic and social progress. In this case, the Philippine government collapsed conservation and development into each other, so that the upkeep of forests was ironically designed to support forest-based industries, and which necessitated the aid of highland farmers (Sajor, 1998: 141). Though efforts to preserve the terraces contributed in limiting the impact of 'Green Revolution' for the highland province, such Ifugao communities now decry the province's lacking infrastructure as an effect of conservation efforts. While 'Green Revolution' initiatives may have been received with less turmoil and resistance in the province, such initiatives were and are not dilemma-free.

In her account of agricultural changes in Haliap, Asipulo, an Ifugao municipality neighbouring Kiangnan, McKay describes the difficulties created by the constant use of pesticides and fertilizers required by the new varieties. Likewise, labour relations were transformed, and farmers now had to compete for access to wage labourers during planting and harvest season. As McKay observed, rice cul-

tivators, “who had previously provided lunch and work in return for an *ubfu* [co-operative] team found that almost all available workers— even kin and neighbors— wanted to shop around for the best pay-and-lunch deal” (McKay, 2012: 49).³ Such changes in the materiality of the grain also resulted in shifts on the Ifugao’s relationship with spiritual realms, as they reconfigure previous agricultural rituals and make use of adopted Christian practices.

The previous dynamics regarding conservation and social development which I detailed above, continue to shape and are implicated in more current initiatives that focus on sustainable development. In the discussion that follows, I evaluate discourses and practice of sustainability, by elaborating on local practices of what I describe as capacity-expansion. I situate my notion of capacity-expansion in relation to critiques on ‘capacity-building’ in sustainable development practices. I likewise outline anthropological critiques on the black-boxing of the term sustainability and prevailing debates on the implementation of projects and programs built on presupposed notions of sustainability.

I ground these discussions by providing an overview of my field research through an introduction of Kiangnan and Hungduan. Throughout, I historically contextualise issues that will be addressed in ensuing chapters. Mainly, I touch upon historical discussions on religious conversion, land-use, indigenous rights policies and rural development. In introducing the research I undertook in Ifugao, I will also reflect on issues of positionality. I examine how social positions (my own included) are negotiated in ways that shaped the interactions and relationships that transpired throughout my research and the methodological and epistemological concerns they present. Finally, this introduction outlines how the ensuing chapters elaborate upon local articulations and enactments of sustainability, in relation to the conceptualisation and implementation of sustainable development projects.

³ *Ubfu* in this case is the same as *ubbu*; within the Tuwali-speaking Ifugao there are variations in the spelling and pronunciation of words.

CAPACITY-EXPANSION IN IFUGAO: POTENTIALITY AND RESILIENCE

I came to Kiangnan, Ifugao wanting to understand the dynamics between heritage conservation efforts and projects regarding the province's need for improved infrastructures. Indeed, my interlocutors demonstrated great concern for infrastructural development in the province and conservation and management of rice fields (more so as an agricultural resource, not as a Heritage Site). In choosing to discuss the world of consultation forums, alternative-energy schemes, and heritage site evaluations, I could not divorce such activities with the tapestry of interactions and relationships that are part of how people experience milestones and daily events. Particularly, what figured highly in how community members navigated the ambiguous state of rice fields and rural development in their daily lives was a concern, above all else, for well-being. Thus, the thesis reflects not simply on how Ifugao cosmology is implicated in development projects, but likewise, how conservation and rural vitalisation efforts (across time) are entangled in the trajectory of Ifugao practices and people's engagements with said efforts.

Helpful in apprehending the Ifugao's emphasis on stimulating multiple possibilities are theoretical approaches to potentiality and resilience. Though potentiality and resilience merit their own thesis, I particularly explore how analyses on such concepts can contribute to an anthropological study of sustainability. Specifically, in relation to sustainability, what I find salient in discussions on potentiality and resilience is how such analyses grapple with issues of temporality and scale. Issues of temporality and scale are particularly significant when one considers that dilemmas in sustainability involve impacts and actions over a period of time within varying scales (i.e. local or global, individual or community). In an ethnography which explores the links in international finance and gold mining in Indonesia, climate change models and environmental movements, Tsing makes the case for the importance of unpacking issues of scales (2005). As she argues, scale "is not just a neutral frame for viewing the world; scale must be brought into being: proposed, practiced, and evaded, as well as taken for granted" (2005: 58). Therefore, to speak of scale means going beyond discussions of dimensions or magnitude and requires examining diverse but entangled fields of

relationships, be it economic, technical or political (Strathern, 1991: xiv; Strathern, 1995; Jiménez, 2005: 158).

Potentiality and resilience also speaks to how people navigate their capacity to act and respond to social and environmental transformations. Since sustainability, within the context of heritage and conservation matters, often concerns an unforeseen future, it is necessary to examine the temporal aspect of sustainability. By addressing issues of temporality and scale, this thesis seeks to discuss the following questions: How does one assess sustainability, when such a process involves an ambiguous amount of time? Since sustainability encompasses a particular spatial engagement, how is sustainability conceptualised and carried out by those whose practices are considered sustainable? What is to be sustained and for whom? Whose responsibility is it? Who decides the criteria for sustainability and how does one do so? This thesis does not aim to resolve such inquiries. Instead, in asking such questions, I explore how the notion and practice of sustainability is deliberated, especially as it relates to management of the Ifugao Rice Terraces and a mini-hydro project that seeks to reconcile development and heritage conservation objectives.

In apprehending potentiality, I draw on the definition of potentiality as presented by Taussig et al:

The first denotes a hidden force determined to manifest itself—something that with or without intervention has its future built into it. The second refers to genuine plasticity—the capacity to transmute into something completely different. The third suggests a latent possibility imagined as open to choice, a quality perceived as available to human modification and direction through which people can work to propel an object or subject to become something other than it is (2013: 4).

The second and third definition of potentiality that has been offered is reflective of the Ifugao's own practices and perception regarding the relationship between people's flexibility, and ability to make adjustments. However, in order to be more relevant to the Ifugao conceptualisation and practices of sustainability, which I describe as capacity-expansion, I choose to amend the first definition that Taussig et al has provided. The first definition can be better thought as the dynamic between containment and release, a nod to the physics definition of potential as stored energy awaiting release. In this way, potential can be thought of

as an emergence or coming into being of expectations, rather than a manifestation of something hidden.

In a collection of articles focusing on a conceptualisation of potentiality, Taussig et al calls for a focus on potentiality as both as an analytic and object of study (2013). As an analytic, potentiality enlivens a longstanding anthropological concern on the dynamic processes of becoming and transformations, and the expectations and aspirations these come with (Taussig et al, 2013: 6). On the other hand, approaching potentiality as an object of study requires exploring the culturally specific ways that potentiality is articulated and embodied in people's everyday life (ibid). The elaboration of potentiality as emergence, plasticity and modification is particularly relevant to understanding the Ifugao's own interconnection between the potential of both humans and non-humans.

In Chapter 1, I explore how the potentiality of people is linked to the cultivation of rice. I especially focus on what role rice plays in issues regarding mobility, social differentiation and the Ifugao's concern for autonomy and solidarity. In Chapter 2, I delve into Ifugao notions on well-being, especially the undertaking of funerals and address how the deceased kin's transition to the afterlife implicates living kin. In Chapter 3, I reflect on the mobility of humans and non-humans in relation to transformations in the Ifugao's undertaking of rice cultivation. Issues of potentiality is also relevant in pondering what is at stake in the production, storing and distribution of energy for electrification and conservation funds for community projects, as I address in Chapter 4. While in Chapter 5 and 6, insights on potentiality are helpful in analysing deliberations over the zoning of heritage zones and its challenges and opportunities.

Though potentiality may seem future oriented, its theoretical purchase lies in the fact that such analyses on the concept involve grasping how "many possible pasts, presents, and futures, many time lines" can both disrupt and support each other (Helmreich, 2013: 146). Baxstrom's study of initiatives in Kuala Lumpur provides a thoughtful discussion on plans that, as Baxstrom notes, begins as *potential* (Baxstrom, 2013[2011]: 141). In his comparison of the National Integrity Plan (a state initiative) and KL Monorail's urban development initiative, Baxstrom suggests that while a plan is oriented towards the future, it does not require a specific future for it to generate intentional or unintentional effects in

the present (143). A plan, in its process of becoming, produces an array of possibilities, regardless of the plan's specificity (Baxstrom, 2013[2011]: 141).

Potentiality cannot be simply associated with possibilities in the near or distant future. Instead, "potentiality is also at work in the ongoing present, as a persistent operator at smaller timescales and in iterative, repetitive processes" (Helmreich, 2013: 139). In detailing the implementation of the Ambangal Mini-hydro Plant in Chapter 4, and the mapping and monitoring of the heritage clusters in Chapter 6, I consider how future plans figure in present engagements. In Chapter 4, I delve into consultations regarding the Free Prior and Informed Consent to understand what is at stake in the drafting and undertaking of procedures for the establishment of trust and how ongoing deliberations inform current ones. On the other hand, in Chapter 6, I focus on the mapping of heritage zones and explore the spatiotemporal saliency of maps.

By considering potentiality in relation to resource conservation and rural development, one cannot deny that potentiality is associated with aspirations and expectations. As Moore points out, aspirations emerge as "possibilities, forms of improvisation, within cultural and social contexts (Moore, 2011: 22). In understanding the aspirational aspect of potentiality, I evaluate Agamben's reflection on potentiality. Guided by the philosophy of Aristotle, Agamben is interested in potentiality associated with knowledge and ability. In this case, the bringing about of one's knowledge and skill into actuality (i.e. a poet's potential to write, an architect's potential to build (Agamben, 1999: 179). In his interpretation of Aristotle, Agamben underscores that potentiality does not vanish in actualisation, since potentiality also encompasses the *potential not to*. Thus, potentiality is "*the existence of non-Being*, the presence of an absence" (ibid). In this way, potentiality and impotentiality or potentiality and actualisation are not in opposition. As Agamben expresses, "Beings that exist in the mode of potentiality *are capable of their own impotentiality*, and only in this way do they become potential" (182). However, I must note that this dynamic is not neutral, there are in fact implications to *potential* and the *potential not to*. I particularly consider such implications in Chapter 5, where I detail my discovery of how one plant came into being in Kiangnan, but was not allowed to do so in Hungduan.

Since potentiality is associated with expectations that have stakes, I must elaborate on the issue of unequal capacities, the varying degrees of potentiality. Here, I draw from Appadurai's reflection on the need to reframe discussions on poverty. For Appadurai, poverty is not simply the lack of financial stability, but is rather about the limitations in one's capacity to aspire. This capacity lies in one's inventory of experiences "of the relationship between aspirations and outcomes," and being in a position "to explore and harvest diverse experiences of exploration and trial" (2004: 68). A capacity to aspire expands other capacities, since cultural capacity "thrives and survives on practice" (69). Those who are privileged have more experiences to draw from and better access to possibilities and options. Those with less means however, have a more fragile and less flexible path "from concrete wants to intermediate contexts to general norms and back again" (68-9).

The unequal distribution of capacities calls to mind Bourdieu's influential concepts on habitus and social capital. Habitus as Bourdieu states is "the systems of durable transposable dispositions, structuring structures predisposed to function as structuring structures" (1977: 72). According to Bourdieu, "the different ways of relating to realities and fictions, of believing in fictions and the realities they simulate" are tied to habitus (Bourdieu, 1999[1979]: 5). Thus habitus generates both a sense of belonging and differentiation, since these dispositions shape the aspirations of individuals and groups in ways that "tend to correspond to the formative conditions of their habitus" (Bourdieu, 2000: 103). Though within social systems, different groups possess varying degrees of what Bourdieu refers to as social capital "the aggregate of the actual or potential resources" tied to one's network of relationships (2002[1986]: 286).

However, it must be noted that such capital is not stable or lasting and can indeed be undermined, questioned and negotiated. In Ifugao, the capacity to aspire, and the relationship and processes that limit or expand this ability, is not as simple as a distinction between *haves* and *have-nots*. In the next chapter, I address land inheritance in regards to sibling relations and differentiation amongst kin. In the chapter I focus on the link between the house and the rice field as it relates to the expansion of capacities. Chapter 2, on the other hand, examines how well-being rituals are constituted in people's reappraised ideas about status

and the widening of kinship ties in regards to the living's relationship with the dead and to non-Ifugao kin.

When situated in relation to current discussion on social resilience, potentiality has much to contribute in problematizing the presuppositions that underpin sustainable development. Potentiality, taken to mean as the capacity to change and as a prospect open to choice, has much in connection to the issues studies on social-ecological resilience grapples with. Initially resilience was an approach for the study of ecological systems, and which Holling defined as:

...the persistence of relationships within a system and is a measure of the ability of these systems to absorb changes of state variables, driving variables, and parameters, and still persist (1973: 17).

This was a challenge directed to approaches which focused on equilibrium. As Holling highlighted, an emphasis on equilibrium is static and inadequate in our understanding of the transient nature of ecological systems and the relationship between people and natural systems (1973). More recently, the idea has underscored precisely the entanglement of social and ecological systems. As in previous approaches, resilience is expressed in relation to change rather than stability.

However, Adger warns that in thinking of social-ecological resilience, one must acknowledge the fact that approaches to the studies of ecological systems cannot simply be imposed on social systems (2003). In fact, Adger points out that social resilience must tackle issues about trust, legitimacy and accountability, especially as they relate to social institutions (Adger, 2003: 202). I address these issues in my account of procedures for the establishment of trust and consent in the implementation of the Ambangal Mini-hydro Plant and the community members' critique of conservation interventions. For Adger, a concern for local and global forces which cause environmental transformations must equally recognise dynamic policies. In fact, recent discussions on resilience (Berkhout et al, 2003; Walker and Salt, 2006; Nelson et al., 2007; Leach, 2008) have more explicitly brought up a concern with the "flexibility and adaptive capacity" of social systems (Leslie and McCabe, 2013: 115). It is within these terms that one can link environmental uncertainties with political and economic ones (116).

In speaking of adaptive capacity, one cannot underplay the significant role local ecological knowledge plays. Though, as Leach challenges, claims on the capacity to adapt as “endogenously-derived (in contrast with the focus on exogenous shocks to socio-ecological systems) misses a key point” (2008: 12). As she suggests, it is ‘endogenisation’, the adaption and management of changing external contexts, which drives change (ibid). Specifically, within the context of Southeast Asia, Ellen provides an edited volume which concerns the “creation, maintenance, modification and transmission of ecological knowledge” in relation to “the forces of instability that shape it” (2007: 3). The contributing authors of the volume do not take local ecological knowledge for granted, and in fact, accentuate its ambiguity and relationship with external forces.

In his contribution to Ellen’s volume, Novellino looks at the relationship of agricultural and political cycles for the Batak communities of Palawan, Philippines. In describing the Batak’s practice of swidden farming, Novellino writes:

...rather than a well-defined Batak farming system that reflects the continuity of a unique cultural heritage, what we have is a multiplicity of opportunistic responses, open-ended processes and coping strategies aimed at ensuring everyday survival (2007: 185).

As Novellino surmises, in their practice of swidden farming, Batak communities clear smaller areas of vegetation prior to election years, but take advantage of more lenient policies during election years to expand their swiddens. In the reconfiguration of practices to take advantage of political systems, the Batak have in fact gained access to their natural resources. In doing so, the Batak not only rely on ecological knowledge, but their ability to navigate the inconsistencies of state policies regarding shifting cultivation. While this reconfiguration of Batak practices has countered impositions made by central authorities, they nevertheless create a relationship of dependency on political contingencies (Novellino, 2007: 210-211).

Leach’s suggestion on the processes of ‘endogenisation’ and Novellino’s analysis of the Batak’s manipulation of political processes shed light on the issue of sustainability in Ifugao. In the chapters that follow, I elaborate further upon the Ifugao’s processes of endogenisation. Though I must point out that endogenisation is not simply a process of accepting and making do with external contexts.

Instead, the process also involves how actors actively scrutinising how external contexts do not properly encapsulate and take into account local values and practices. In Chapter 4, I examine how the Ifugao ponder introduced projects deemed sustainable and situate such projects in relation to local resource management practices. In Chapter 6, I consider Ifugao visualisations of the Ifugao Rice Terraces in comparison to the concerns of heritage conservation. In both chapters I examine how sustainable projects are questioned, challenged and re-configured as they are situated within the context of Ifugao conceptualisation and practices.

As this thesis concerns social and environmental transformation and processes of maintenance, insights regarding the relationship between continuity and change have been useful, especially in how such concepts are discussed in anthropological approaches to Christianity. While I do not provide a robust discussion on anthropology of Christianity or religion in my thesis, I nevertheless draw from the work of: Keane (2007), Allerton (2009), Chua (2012) and essays in a special issue on the spiritual landscape of Southeast Asia in *A Journal of Social Anthropology and Comparative Sociology*. Such works do not explicitly address development projects, although Chua's monograph does address Malaysia's national state development plans. These studies in Christianity and religious conversion offer a means to include an analysis on the religious dimension of people's social life, especially in development discourse. In regards to potentiality and resilience, such work also expands anthropological approaches to sustainability that touches upon the temporal and spatial matters of people's adaptive capacities.

'CAPACITY-BUILDING' IN SUSTAINABLE DEVELOPMENT

The issue of reconciling rural development with heritage conservation efforts is not specific to Ifugao. The Ifugao Rice Terraces occupy a place on the World Heritage Site List alongside other terraced rice fields such as, Indonesia's Cultural Landscape of Bali Province, inscribed in 2012 (United Nations Educational, Scientific and Cultural Organization, 2012a: 189-192) and China's Cultural Landscape of Honghe Hani Rice Terraces, inscribed in 2013 (United Nations Educational, Scientific and Cultural Organization, 2013a: 182-186). As

comparable rice terraces, the promotion and management of Indonesia's Cultural Landscape of Bali Province and China's Cultural Landscape of Honghe Hani Rice Terraces echo that of the Ifugao Rice Terraces. UNESCO especially promotes the strong connection between ritual practices and agricultural techniques in such inscribed agricultural landscapes. Among similar issues deemed as challenges to the management of both the Cultural Landscape of Bali Province and the Cultural Landscape of Honghe Hani Rice Terraces are construction within the terraces and changing agricultural practices (United Nations Educational, Scientific and Cultural Organization, 2012a; 2013a). Certainly, the situation of each heritage site, once understood within their context, is distinct. Besides the context that I provide throughout this thesis, what is distinct about the situation in Ifugao is the advent of the mini-hydro plant, concurrently with the Ifugao Rice Terraces' status as an endangered World Heritage Site.

I should point out also that concerns regarding electrification, transportation networks, management of natural resources and erratic weather conditions are not unique to Ifugao, and are in fact prevailing global concerns. The fact that such matters are timely and pervasive deserves our continued attention. However, in the case of Ifugao, these concerns were being highlighted in interventions that explicitly link conservation and development objectives. In the chapters that follow, I explore how such interventions in Ifugao were transpiring discursively and in practice. The promotion of both energy and conservation initiatives echo the key tenet of sustainability introduced by the World Commission on Environment and Development (1987). The commission called for 'sustainable development', a marriage of environmental protection and socioeconomic development, whereby meeting present needs should not compromise the environment and needs of future generations (1987: 43).

In his discussion on the potency of 'sustainability' as a buzzword, Scoones points out that the term was coined in the eighteenth century by a German forester named Hans Carl von Carlowitz, who used the term to suggest long-term practices for forest management (Scoones, 2007: 590). Scoones refers to 'sustainability' as a 'boundary term' "building epistemic communities of shared understanding and common commitment" (589). The term came into global prominence in parallel with the environmental movement of the 1980s and 1990s,

when “environmentalists were keen to show how environmental issues could be linked to mainstream questions of development” (590). Labels such as ‘sustainable development’ or ‘sustainable tourism’, which are often employed to describe development initiatives, are fertile grounds for ambiguities, ambivalence and contestations. Yet, these ‘buzzwords’ serve to conceal sites of deliberations, while staging the promise of possibilities (Cornwall, 2007: 471). Anthropological critiques over the black-boxing of ‘sustainable development’ or the implementation of programs underpinned by taken-for-granted notions of sustainability are not lacking.

In problematising the now commonplace definition of sustainable development promoted by the World Commission on Environment and Development, Stone considers how the term makes assumptions on measurement, boundaries and agency (2003: 93). Stone calls attention to definitional issues in anthropological analyses of sustainability and notes:

Defining sustainability in anthropological terms has proven difficult, especially given the complexity of the less than ideal adaptation of people to the landscape and its change through time. People obviously are trying to survive as best they can, given enormous uncertainties in political, economic, and environmental systems throughout the developing world (Stone, 2003: 94).

While people’s adaptation to environmental transformations does indeed concern survival, there is a wide spectrum between simply surviving and really thriving. This thesis aims to address how community members negotiate their capacity to navigate the space along that spectrum. As Leach suggests, a study on sustainability must refer to “specified qualities of human wellbeing, social equity and environmental integrity, and the specific system qualities that can sustain these” (2008: 3). In this case a study on sustainability must address not just management of natural resources, but also social resources (Scoones, 2007; Stone, 2003).

A focus on definitional issues of ‘sustainability’ may lead to defining the term on a local level and to illuminate how communities deliberate the ambiguities of the term. In her monograph on the Sakha of subarctic Russia and their attempt to “balance adaptation and resilience” Crate particularly recounts her undertaking of individual and focus groups interviews to understand Sakha notions

of sustainability (2006: xx). Her aim in doing so is to “define sustainability on a local level, clarify the barriers to those definitions and create models of village-level sustainability” (Crate, 2006: 251). Crate’s approach allowed for community members to contest misconceptions regarding transformations in their practice of cow-keeping and likewise provided insight on what community members deemed central to reconciling present and future community needs. However, in simply focusing on defining sustainability, sustainability becomes a matter of translation and categorisation of local practices.

This thesis does not take the approach of identifying local definitions of ‘sustainability’; in fact, in Chapter 4, I note why such an approach was problematic. Instead, I focus on the dynamics between temporality and scale that a notion of sustainability is laden with, and I explore the ways in which Ifugao articulate and engage with the issues that arise from such relations. In speaking of temporality and scale, I especially refer to the dynamics between present and future generations, short-term and long-term concerns and actions, along with transformations in and maintenance of practices. In doing so, I reflect upon the Ifugao’s own focus on kinship ties, stewardship and the potential of both humans and non-humans, and how these contribute in expanding capacities. I especially examine how these emphases are constituted in well-being rituals, agricultural activities and how they converge in people’s historical and current engagements with conservation and development interventions. Thus, this thesis shifts the discussion on sustainability from a concern on the identification and measurement of outcomes, to a concern on the stimulation of and deliberation over possibilities.

From the environmental issues addressed in the 1992 United Nations Conference on Environment and Development, otherwise known as Earth Summit, a case was made for ‘co-management’ in sustainable development. Amongst the key tenets of sustainable development is that management of natural resources and social development must be shared amongst civic organisations, local communities, donors and the state (Leach et al., 1999: 225). Central to the idea of co-management is community participation (ibid). In the management of the Ifugao Rice Terraces, UNESCO interventions emphasised participatory methods, through public forums and stakeholders’ planning workshops. Such efforts

were for recruiting community members in identifying and implementing conservation initiatives.

Similarly, an aspect of the Ambangal Mini-hydro Plant is the promotion of capacity-building activities to establish participatory methods in the management of the Rice Terraces Conservation Fund. In this case, building capacities, is not only a means to an end, but is in fact, also the goal. In elaborating on issues of capacity-building in relation to sustainable development, Cooke and Kothari have provided an edited volume which scrutinises participatory methods (2001). In his contribution to Cooke and Kothari's edited volume, Mosse argues that in participatory planning, it is not professionals who absorb and consider local perspectives, but rather, locals learn to reconfigure 'planning knowledge' (2001: 21).

In White's analysis on the political nature of participation, she acknowledges that participation is not simply about being there (1996: 7). As White asserts, who participates and the level of participation by community members must be scrutinised. Failing to question "who is involved, how, and on whose terms," as White warns, can result in the perpetuation and reproduction of existing power relations (14). Guided by such critique on participatory methods, in Chapter 4, I examine town-forums regarding the implementation of the Ambangal Mini-hydro Plant, while in Chapter 6, I discuss public consultations concerning the monitoring and mapping of the Ifugao Rice Terraces. In discussing these activities, I examine the assumptions that guide them and their implications on land tenure, livelihoods and the relationship amongst community members with ambiguous positionalities (see Chapter 4 and 6).

In their interrogation of forest conservation efforts in West Africa, Fairhead and Leach uncover presuppositions that guide dominant views on the relationship between forests and peoples and its implication on forest conservation policies and projects (1998: xiv). As they argue, such misrepresentation about West African forests and their management, simplifies ideas about 'community', whereby community is taken as a homogenous unit, and harmony between people and between people and forests is assumed (179). Hall et al address how local management may arise or perpetuate exclusionary practices, particularly in the context of community based natural resource management initiatives in

Southeast Asia (2011). As Hall et al explains, while such initiatives allow for the involvement of locals in decision-making processes, it also has the consequence of creating territorial and social boundaries. Ambiguous spatial boundaries of natural resources along with the diverse identities of community members could create exclusions within communities (Hall et al, 2011: 73). In ensuing chapters, I further detail and discuss the diverse positionalities of community members in regards to how they navigate challenges and opportunities arising from conservation and development interventions.

KIANGAN AND HUNGDUAN

The questions and aims I present in this thesis arose from a 14-month long fieldwork, which was mostly spent in the municipality of Kiangan, with some trips to the neighbouring municipality of Hungduran. Kiangan is a municipality which lies on the south-western part of Ifugao Province. Among the municipalities bordering Kiangan are Hungduran and Lagawe, a significant detail that I address throughout the thesis. I especially discuss Kiangan's relationship with the municipality of Hungduran from Chapters 4 to 6, in relation to the management of the rice terraces and construction of a mini-hydro plant. Kiangan's topography is characterised by a mountainous terrain, dissected by rivers and streams, whose water originates from highland forests which serve as water catchment areas. The municipality has a population of 16,294 spread across 20,419 hectares, with a concentration of the population residing in Baguinge and Poblacion, the town centre. The population is largely Tuwali-Ifugao, followed by Ayangan and Kalanguya Ifugao and then Ilocanos (non-Ifugao). The most commonly spoken dialect is Tuwali-Ifugao, followed by English which exceeds Ilocano and Tagalog, the national language of Philippines.

Kiangan, as in the rest of the nation is predominantly Catholic, with over 73.92% belonging to the Catholic parish, while 9.92% and 7.78% belong to the Pentecostal and Born Again Parish respectively (Municipality of Kiangan, 2011: 3-5). Besides the St. Joseph Church, the other major church in the municipality is the United Church of Christ in the Philippines, a parish serving members of Protestant denominations. There is fluidity in the congregation of both churches, in that Catholics will attend masses at the Protestant church, especially if their

child attends Ifugao Academy, the high school associated with United Church of Christ in the Philippines.

Specifically, St. Joseph High School was established in 1934 by Father Jerome Moerman of the *Congregatio Immaculati Cordis Mariae* (Congregation of the Immaculate Heart of Mary), a Roman Catholic missionary originating from Belgium. The missionary resumed efforts in religious conversion that was abandoned by the Spanish missionaries following the Spanish-American War. Spanish missionaries were in fact most active in Ifugao throughout the 18th century and the beginning of the 19th century. During this period, military expeditions were accompanied by Augustinian and Dominican missionaries, though with little success. However in 1752, a Dominican missionary was established in Bagabag, “to serve as a home base for the planned conquest and pacification of the ‘Igorrotes’ of Quiangan (Kiangnan, Ifugao)” (Dumia, 1979: 27).

By the early 1900s, earlier attempts in Christianisation by Spanish missionaries were recalibrated by Belgian missionaries. Among the first Belgian missionaries in Ifugao Province was the Reverend Jerome Moerman. His Mayoyao counterpart, Father Francis Lambrecht, wrote extensively about Ifugao culture and provided analysis on how to best adopt local Ifugao customs within the framework of Catholicism (1963). While many Ifugao succumbed to baptism, abandoning the practice of rituals was another matter, particularly in cases of illness and a difficult agricultural year. Catholic missionaries encouraged the termination of such practices. However, for the Ifugao, rituals were inextricable to social ties (see Chapter 2). Becoming a devout Christian meant severing both familial and community links (Jenista, 1987: 160), a disconnection the Ifugao were reluctant to undergo. Due to the Ifugao’s historically tenuous relationship with communities within the purview of the church and state, conversion presented a dilemma. Conversion implied a particular transformation, whereby becoming a Christian was synonymous with becoming a Filipino. As Jenista recounts, “a cargador [porter] for one missionary remarked that he would not become a Christian because he did not wish to become a Filipino” (1987: 166).

Throughout the colonial period of Philippines, religious identity was a method of how colonial officials distinguished between ‘Filipinos’ and ‘natives’. In her examination of ‘Igorot’ identity, McKay reflects on the term in relation to

the categorisation of Philippines' lowland and upland populations and the recruitment of indigenous identity in "negotiations with the state" (2006: 292). 'Igorrotes' derives from a Tagalog word meaning mountain people, which the Spanish colonial government adopted as a term referring to all habitants of Luzon's mountain region (Finin, 2005: 26-27). As McKay writes, the term was appropriated by Spanish colonial officials in the sixteenth century. For Spanish colonial officials, and subsequently, American colonial officials and various academics, the term came to be associated with, "the uncolonised uplands" (McKay, 2006: 294).

With the presence of such missionaries in the province after World War II, what was at stake for community members was access to welfare services. Catholic and Protestant missionaries established and operated clinics throughout the province with the intent of supplementing and sometimes altogether replacing the Ifugao's wide practice of ethnomedicine based on botany and rituals (Kwiatkowski 1998: 146). These church-affiliated clinics and hospitals were more convenient and accessible than government hospitals. Despite conversion and the availability of medical services, the Ifugao perpetually observed well-being rites (Kwiatkowski, 1998: 164). The Belgian missionaries continued to operate in Ifugao until the early 1990s. Post-World War II aid ushered in an intensification of missionary work and church-affiliated medical services, ranging from an Evangelical clinic in 1949, a Filipino Catholic missionary in 1958 to a Pentacostal one in 1989 (ibid). In 1992 alone, Philippines received \$13.3 million from Catholic Relief Services (ibid).

Community members in Kiangnan by and large live in cement single or two-story detached houses. Houses of those with less means may have more modest structures, wooden houses with zinc roofs. Usually, middle-class homes consist of an outdoor patio. For those with meagre means, houses may have undorned patches of soil or grass as outdoor space. These outdoor spaces are multipurpose, and utilised for entertaining visitors, drying clothes or airing out unwinnowed rice grains. Houses of middle class families may have both an indoor and outdoor kitchen. Wealthier community members have gardens and pig pens, in addition to their front patio. Some of the community's largest houses are owned by those with family members working overseas, and often, other com-

munity members will refer to these houses as ‘foreign-funded’. Ifugao-style houses, consisting of a single-room, wooden structure on four large posts and topped with a thatched roof, rarely, but still exist in Kiangnan, although they mostly serve as rice granaries. Kiangnan consists of one national road which connects it to Tinoc and to the rest of the Cordillera Region and beyond. Villages are connected via secondary and tertiary narrow, paved roads. Certain neighbourhoods which do not lie along motorised roads are connected via semi-paved footpaths, while others are reachable only by trekking through make-shift trails across terraced fields and the mountainous terrain.

Several weeks into my fieldwork, a group of professors and research students from a Japanese university were hosted by Save the Ifugao Terraces Movement, a local NGO I volunteered for whilst in Kiangnan. As one of my tasks as a volunteer, I travelled frequently with the organisation’s EcoTour department, accompanying tour guides who led tours around Ifugao Province. During a particular week in March, we guided the Japanese visitors around Hungduan and Banaue. Pre-arrangements to their visit included a courtesy call with the mayor of Hungduan, giving me the opportunity to meet the municipality’s mayor. It was during a conversation with the mayor that I came to know about a similar mini-hydro plant that was previously proposed for Hungduan, a matter that would be continuously broached in my subsequent visits. I detail that experience in Chapters 5 and 6, along with my analysis on the proposal and eventual rejection of said mini-hydro plant. This development in my research came rather fortuitously and illuminated the instant and enduring processes and transformations entangled in community members’ access to and management of resources.

Hungduan derives from the word *hungdu*, meaning ‘converge’ or ‘stopping place’ as indicated in a *hudhud* (epic narrations), which describes Hungduan as a resting place for travellers (National Commission on Indigenous Peoples and Municipality of Hungduan, 2006: 6). Ironically, though Hungduan borders Mountain Province and three Ifugao municipalities, its lack of motorised roads and available mass transportation creates a feeling of isolation rather than convergence. Like Kiangnan, most of Hungduan’s population are Tawali-Ifugao, and predominantly speak the Tawali dialect, though with a slightly different vocabulary and pronunciation. Until 1921, Hungduan was in fact a part of Kiangnan, and be-

came its own municipality as a result of the Executive Order No. 6 (National Commission on Indigenous Peoples and Municipality of Hungduan, 2006: 6). With a land area of 22,911 hectares and a population of 9,380 (in 2000) (National Commission on Indigenous Peoples and Municipality of Hungduan, 2010: 2-7), Hungduan is sparsely populated.

Conditions or customs were not uniformed throughout the Cordillera, even within Ifugao Province or one municipality. While some areas of Benguet fought for their gold mines in 1759, they did not ardently defend tobacco fields destroyed in 1830s. However, other regions within the same province defended their right to sell tobacco well within the late 19th century. In the case of headhunting, in Lepanto, headhunting seized in the 1890s, whereas headhunting persisted in Kiangang even until early 20th century (Scott, 1974: 7). Within Ifugao there are three major ethnolinguistic groups, the Tuwali, Ayangan and Kalanguya. Among the three groups are variations in rituals, textile patterns, language and agricultural practices. In the thesis, because I focus solely on Kiangang and Hungduan, I am limited in my analysis to the cosmology and practices of Tuwali Ifugao (mostly the Tuwali population of Kiangang). Even in this restricted scope there are variations in status rituals or agricultural activities between and within the two municipalities, which I discuss in subsequent chapters (see Chapters 1 and 3).

Despite such nuances, both the Spanish and American colonial governments reduced indigenous identity to a spatial distinction. Under the Spanish colonial government, Spaniards born in Philippines, and Spanish or Chinese *mestizos*, were the only ones to be acknowledged as citizens. The rest of the Philippines' populations not bearing this identity were considered *indios* (Ileto, 1979; George, 1980; McKay, 2006). In Luzon, this distinction came to be associated with a spatial arrangement between the Catholic converts in the lowlands and the non-Christians of the highlands. The Philippine population became categorised into those who could be governed, in this case, the Catholic converts, in contrast to the communities outside the reach of the colonial government. To the Spanish and American colonial governments, the lowland populations, brought within the purview of the state, were associated with "submission conversion,

and civilization,” while residents of the highland communities were associated with, “independence, paganism, and savagery on the other” (Scott, 1974: 7).

American colonial officials dispatched to the Cordillera, carried the baggage of their own relationship with American policies regarding the Native American population. American colonial personnel framed Filipinos within their own perception of ‘American Indians’, particularly since Filipinos were deemed *indios* by the Spanish. However, having already been influenced by Spain, with some intermarriage amongst Filipinos and Spaniards, the lowlands had ties to Europe in ways that made them unrecognizable to America’s idea of ‘natives’. Beyond the Christianised Filipinos of Luzon, American officials saw distinct ‘tribes’. This perception, “gave credence to a frame of mind that, as in the United States, saw ‘native’ unities and ‘tribal’ affiliations that few local residents saw themselves” (Finin, 2005: 25). Actually, as McKay points out, the term ‘Igorot’ defined populations in terms of ‘tribes’ based on provincial or municipal administrative boundaries, “rather than self-appellation or language” (2006: 295). As will be detailed in subsequent chapters, this presupposed categorisation is a prevailing issue in the zoning and designation of heritage rice terraces clusters.

METHODOLOGICAL DISCUSSION

While in Kiangnan, I lived in an Ifugao household consisting of my host-mom, Adoracion, whom I referred to as Auntie Doring, her nonagenarian mother, Apo (grandma) Talin, and Auntie Doring’s nephew and three grandchildren (who were all attending high school at the time). Auntie Doring, who was born during World War II, was in her late 60s and a retired educator and school administrator. Apo Talin often recounted that when Auntie Doring was just a baby, to escape the ravages of war, Apo Talin had to hike with her family to a more elevated village, with Auntie Doring, her only child, strapped to her back. We lived in a neighbourhood just off a busy secondary road that mass transit vehicles pass through to reach the Provincial capital. At the end of our street towards the secondary road, was an elementary school, which made mornings abuzz with activities and noise both from commuters heading to work and children heading to school. During the school’s recess, the street would be lined with some food vendors selling snacks.

I lived in the basement of Auntie Doring's two-story house. The front of the house had a covered patio, with cement-benches that wrapped around, acting as a fence. It is out in the patio where Apo Talin often spent her mornings, sitting on a *hagabi* (a bench, see Chapter 1), sewing, chewing betel nut, folding clothes and welcoming guests. To one side of the patio is an exposed cemented area, where we often hung our clothes and laid rice grains to dry. To the other side of the house are the stairs leading to the basement and the garden which consists of the pig-pens and the tombs of deceased family members. Our particular neighbourhood was characterised by how many former teachers resided in the area and its proximity to the elementary school, thus being named 'Teacher's Avenue'.

Auntie Doring was active in community affairs and served as an officer in the Catholic Women's League affiliated with St. Joseph, the local Catholic parish. Like many Filipinos, Auntie Doring had a child in the United States, a daughter, who was the mother of two children who lived with Auntie Doring. She also had two other sons living in Baguio, and another two sons living within Ifugao. Similar to the situation faced by many female elders in Ifugao (especially the widows), Auntie Doring had a tremendous responsibility not only of minding her own well-being, but of caring for the well-being of three generations: her grandchildren, children and sole living parent. Auntie Doring had a coterie of female friends who were members of the Catholic Women's League and active members of the community, and several who were retired teachers. Committed to integrating me in the community, Auntie Doring included me in all their activities. As such, I spent a great deal of time with my host-mom and her friends, attending prayer services, *hamul* (feasts, see Chapter 1 and 2) and a variety of community events. Some of the women were also involved with the Kiangnan Department of Tourism's guest house enterprise, and they offered some rooms in their house for tourist accommodation.

In being a member of Auntie Doring's household and being in the company of her friends, I was privy to everyday conversations regarding both household and community affairs. I was likewise acquainted with a network of community elders who had considerable access to and participation in many community happenings: annual festivities, parish activities, town forums, weddings,

funerals and all manner of household-sponsored occasions. However, I must note that I resided in a household which is centrally located, in close proximity to local government buildings as well as stores and markets. While my domestic life and familiar relations in Kiangnan allowed me the support, aid and access necessary for carrying out research on conservation and development projects in Ifugao, it also resulted in some detachments. For one thing, I was not as immersed in agricultural activities, as I had hoped to be. In fact, most of my experience with rice farming was via volunteer work with the EcoTours department of Save the Ifugao Terraces Movement, which ran a rice-cycle tour (see Chapter 3).

My home-stay arrangement was facilitated by Save the Ifugao Terraces Movement. Before coming to Ifugao Province in 2011, I sought to establish contact with organisations or academic institutions that could enable my entry and integration in the Ifugao community. This led me to an affiliation with Save the Ifugao Terraces Movement. The NGO was likewise recommended to me by the University of Philippines - Diliman, School of Urban and Rural Planning, the institution that eventually became my university affiliate throughout my research. Save the Ifugao Terraces Movement – though bearing ‘Ifugao Terraces’ in its name – is not exclusively dedicated to the conservation of the Ifugao Rice Terraces. Rather, the organisation addresses issues ranging from livelihood projects, renewable energy and the transmission of indigenous knowledge. However, a great deal of their community partnerships still does involve communities within the inscribed heritage zones.

I discuss the organisation’s activities in later chapters (see Chapters 3-6); though, in this introduction, I primarily address my relationship with the organisation. As a volunteer, I participated mostly in the organisation’s EcoTour department. My involvement consisted of joining the EcoTour guides as they accompanied mostly Korean (and some domestic) tourists on hikes to Nagacadan for the carrying out of agricultural activities (see Chapter 3). Likewise, as an affiliate for both Save the Ifugao Terraces Movement and University of Philippines’ School of Urban and Rural Planning, I was asked to present a paper in a forum. While neither affiliates ever made an attempt to edit or regulate the research I conducted, this does not mean that my connection with them did not shape how my research transpired.

In addressing issue of access in fieldwork, Mosse states that as we earned access through membership in communities, “we so substituted a set of boundaries that kept us *out* (the problem of access) with another set that kept us *in*” (2006: 936). Indeed, while my household membership and my affiliation with Save the Ifugao Terraces Movement provided me with relationships which were integral to my research, it likewise impacted not only how I related to community members, but more importantly how they related to me. Part of navigating relationships in Ifugao required negotiating my association with particular institutions, organisations and households, and additionally, being critically aware of my positionality, aspects of my identity that are markers for relational positions (Maher and Tetreault, 1993: 118). However, and more importantly, in the engagements that transpired between me and community members, what emerged is a better understanding of how community members themselves navigated their own ambiguous positionalities. These positions may include but are not restricted to: “geographical location (margins or centers), social standing (dominant or subaltern), and political stance (acquiescent or resistant)” (Li, 2005: 385).

Although, the initiatives I detail in this thesis involve multi-national actors, this thesis for the most part details how such initiatives are recalibrated, repurposed, deliberated, obscured and managed by local community members. These community members or ‘stakeholders’ as they are often referred to in project reports, hold differing positions in relation to the very conservation and rural development initiatives that aim to include them. These positions do not have clear distinctions since project proponents are at once community members and provincial government employees, farmers can be at once board members and local elected officials. Relationships are likewise messy, since actors of varying political and social positions are often friends, acquaintances, former classmates or kin. I, along with how my research transpired, was implicated in such messily entangled relations.

Mosse suggests that objectivity in ethnographic research “derives not from standing above the fray or suppressing subjectivity, but from maximizing the capacity of actors to object to what is said about them” (2006: 939). Due to the nature of my research, which in part addresses the political aspects of con-

conservation intervention and development projects, this meant that I too was open to scrutiny and criticism. In speaking with plant operators, government employees and rice-cultivators from various villages, their reaction to my association with Save the Ifugao Terraces Movement was telling of how they related to the organisation, especially the fragmentation and disconnect within and between communities and the NGO (see Chapter 3). Additionally, in my interviews with rice cultivators, dynamics between land owners and tenant farmers reveal the inequity in how people navigate short-term concerns in relation to long-term aspirations and welfare (see Chapter 3).

Aside from everyday conversations both while 'staying put' in a particular village, and while on the move between and within municipalities, I conducted semi-structured one-on-one interviews, and likewise focus group interviews. While one-on-one interviews are preferable, there were some cases, particularly in relation to discussing the Ambangal Mini-hydro Plant, in which my interlocutors preferred to speak in groups. There were however, a few cases in which a one-on-one interview, held outside the patio of an interlocutor, attracted the attention of neighbours and bystanders, spontaneously turning them into group interviews (see Chapter 3). I took such moments as opportunities, allowing me to be part of how neighbours deliberate with each other.

As part of a requirement to fulfil a permit to work with Philippines indigenous community, I was accompanied by a representative from the National Commission of Indigenous Peoples, a process I discuss further in Chapter 4. The commission officer not only accompanied me to interviews, but sometimes also provided translation. Although, the National Commission on Indigenous Peoples served as gatekeepers for the Ifugao community, this was not free of awkward engagements and tension. As I will elaborate in Chapter 4, the personnel of the National Commission on Indigenous Peoples had to navigate their position as being at once government employees and community members of host communities impacted by conservation and development interventions. It is for this reason that as Davies suggests, the consent of gatekeepers, "does not always signal the agreement of these others, and researchers should seek consent from them directly to ensure that their participation is in fact free of undue coercion" (1999: 51). Interestingly, by conducting the interviews and forums I undertook for my

research, in some ways, I was recreating the very procedures that were carried out by the actors involved in the implementation of the Ambangal Mini-hydro Plant. As I discuss in Chapter 4, this came with residual uneasiness regarding the project, which implicated my research.

Beyond the theoretical and pragmatic concerns posed by Ifugao's situation, I was likewise motivated to carry out research in Ifugao due to personal reasons that later shaped my research methods. Though I was born and lived in Quezon City until I was seven, and while I have returned to Philippines several times as a tourist, my experience of the country has been largely restricted to Manila and various coastal towns. Hence, I actively avoided any proximity to the coast, and Ifugao Province is located in the Cordillera Administrative Region, the only landlocked region in Philippines. Yet, being in Ifugao also placed within my reach, provinces where extended relatives reside. Actually, before arriving to Kiangnan in 2011, I was on a family vacation in Philippines in the North-eastern coast of Luzon. After leaving the coast, my parents decided to come with me inland to Kiangnan for a few hours, before they returned to Manila. Thus, they met members of my eventual host-family and caught a glimpse of what would be my neighbourhood for the next year.

In considering my own diasporic history, I refer to Abu-Lughod's ideas on being a 'haflie', a researcher "whose cultural identity is mixed by virtue of migration, overseas education, or parentage," (1991: 137). As Clifford points out, researchers with diasporic relations grapple with an ambivalent sense of belonging, wherein varying "subjective distances and affiliations are at stake" (Clifford, 1997: 208). Abu-Lughod notes that these researchers, "speak with a complex awareness of and investment in reception" and wrestle with "multiple accountability" (Abu-Lughod, 1991: 142). Interestingly, my own ambiguous cultural identity was complicated by how the province's historical engagements with non-Ifugao Filipino communities, Japanese and Americans, inform current interactions.

In the early weeks of my residence in Kiangnan, several community members mistook me for being a Japanese researcher, a presupposition informed by previous experience with Japanese academics staying in Kiangnan. Not knowing I was Filipino, particular community members commented on my lack of

knowledge about Japanese culture or were surprised by my knowledge of Tagalog. This assumption though proved to be a challenge in some cases when I was mistakenly associated with proponents of the mini-hydropower project or Japanese representatives from previous conservation-related visits. In Chapter 4, I particularly discuss the community members' ambivalence towards Japanese development projects. In other cases, my being American was prioritised over my own Filipino background. In Chapter 3, I recount how farmers instinctively associated me with the American Peace Corps programme. As a result, there was a tendency for farmers to relate to me their problems with eels, a project associated with a Peace Corps volunteer years before.

As this research involved both extended stays and travel between sites, a methodological discussion on the concept of the 'field' and its epistemological implication is required. I suggest that though there's merit to the concept of multi-sited ethnography as advocated by Marcus (1995), it is laden with presuppositions on the nature of the field-site and the sociospatial relations constituted in fieldwork. In thinking about mobility and fieldwork, the term 'multi-sited' should not simply be associated with the idea of movement between two sites; rather, it should also be an acknowledgement that localised ethnography is in itself multi-sited, consisting of heterogeneous spaces dispersed across a landscape. In the case of Kiangnan, the diversity within the landscapes was integral to the negotiations between actors, including my own negotiations in navigating my way through the landscape of Ifugao, but also navigating my relationships with diverse community members, across different scales.

As Hall suggests, drawing from his own fieldwork on outreach work in Cardiff, "mobility need not exceed and escape place...staying put, as any fieldworker can tell you, involves moving around" (Hall, 2009: 575). Multi-sited then should not simply mean a spatial extension in terms of distance, but instead be an extension in the ways in which, "inquires, while remaining local, might nonetheless be brought together with movement" (572). Pedestrian movement, along with the modes of transportation we embark on should be taken as research methods, in that conversations told about and through the landscape result in mobile narratives that are salient in understanding varying relationships and experiences across diverse spaces. It is as Allerton articulates, a "sense of creating

place and relationships out of movement” (2013: 176). Our mobility, and the mobility of those (humans and non-humans) we interact with, is part-and-parcel of how we navigate our various relationships in the field and our engagement with the ambiguities of fieldwork.

THESIS STRUCTURE

The central argument of this thesis is elaborated upon in six chapters that justify the need to approach sustainability as a process that hinges on multiplicity and unpredictability, rather than a strategy for achieving social or environmental harmony. Subsequent chapters will also further draw out the link between potentiality and resilience and what insight they contribute to an anthropological study of sustainability. The thesis is divided into two parts, with the first three chapters (Chapters 1-3) focusing on the following, respectively: Ifugao kinship, funerary rituals and agricultural rituals. The first three chapters present local conceptualization on stewardship and prosperity, which provides insight on resource management. Thus the first three chapters of the thesis preface the second half of the thesis which features more prominently the current deliberations over heritage and development interventions. The second half of the thesis addresses (Chapters 4-6) the following matters: implementation of the Ambangal Mini-hydro Plant, an unrealised mini-hydro power project in Hungduan and the mapping and monitoring of the Ifugao Rice Terraces. The thesis is structured in this manner to situate my idea of capacity-expansion regarding local notions and practices of sustainability, in relation to capacity-building practices in sustainable development that promotes co-management of resources and projects.

Chapter 1 details the Ifugao’s emphasis on kinship, and its link to rice-cultivation, thus connecting human and non-human potential. The chapter considers kinship ties through an analysis of the link between the house and the rice field, as it relates to siblingship. In the chapter, I touch on the Ifugao principle of self-autonomy, solidarity and stewardship in regards to inequities between siblings and differentiation amongst kin. In a discussion on kinship, feasting and the production and distribution of rice, this chapter addresses matters regarding land-inheritance and status. In doing so, I elaborate on how rice is constituted in

processes of both assimilation and differentiation amongst kin in ways that expand capacities via the potential of both people and rice.

Chapter 2 provides an analytical account of Ifugao well-being rites with a focus on funerary arrangements. This chapter on funerals is linked to the first chapter's discussion on kinship ties. While the previous chapter focuses on the sharing of work in rice cultivation and rice meals, Chapter 2 primarily concerns the work undertaken for the dead. In particular, I consider how changing funerary arrangements for the dead implicate the well-being of the living. In this case, genealogical ties, and the rituals that actualise these ties, transform funerals into a way for living and dead kin to reciprocally care for each other. Mortuary rituals impact avenues available to the well-being of the living and the deceased through the expansion of kinship ties between ancestors and descendants. Deceased kin are therefore, involved in people's decision making processes regarding matters of well-being. The focus on funerary rituals additionally reflects upon how Ifugaos conceptualise and perform moral obligations to kin in relation to status, religion and mobility.

While Chapter 2 focuses on well-being rituals, Chapter 3 delves into Ifugao agricultural activities. In this chapter, I more fully discuss land-use, tenure and inheritance, along with the investments and labour devoted to the agricultural activities integral to rice cultivation. Primarily this chapter reflects on how rice-cultivation necessitates work beyond the field. As I draw out in the chapter, such work indelibly links the potential of people to the potential of rice. I further note that the work undertaken for rice varies not only across the province, but even within a municipality. By focusing on transformations in rice-cultivation and its various potentials, I address the issue of temporality in the conceptualisation and practice of sustainability as people reconsider the past in regards to future aspirations.

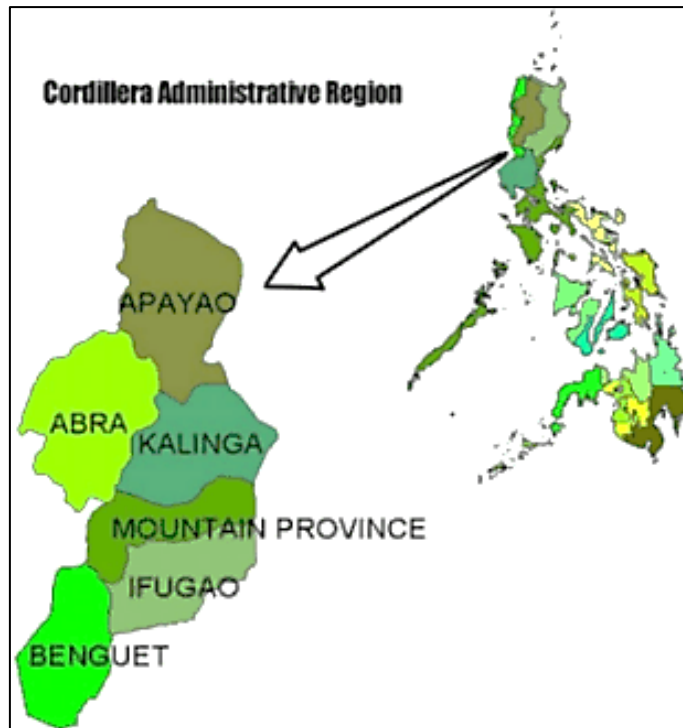
Chapter 4 introduces in greater depth the Ambangal Mini-hydro Plant Project and its link to issues concerning the Ifugao's agricultural activities. The chapter examines the varying expectations involved in the Ambangal Mini-hydro Plant, and the engagement that resulted from the realities which actually manifested. The chapter especially evaluates participatory methods carried out for the implementation of the mini-hydro project in relation to local practices of

consultation and decision making I address in earlier chapters. As such, I explore procedures undertaken for the establishment of trust, and I consider how the instability of trust results in the creation and re-creation of further procedures. This chapter situates the first three chapters in relation to notions and practices of 'participation' and 'capacity-building' within discourses and practice of sustainable development.

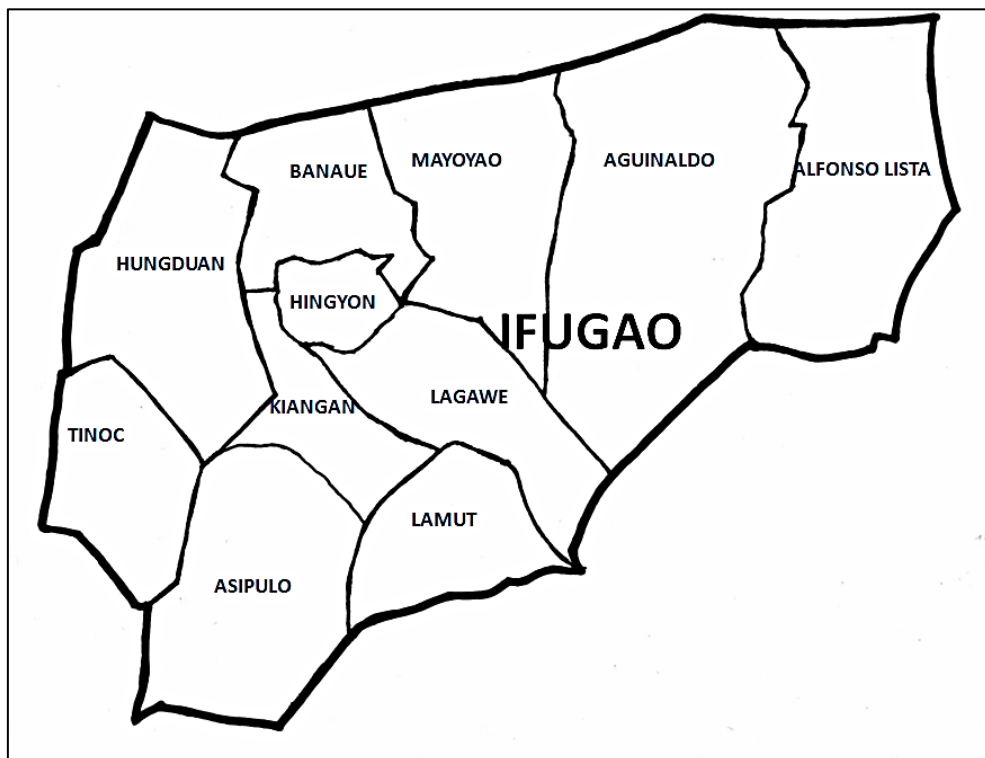
In relation to Chapter 4, Chapter 5 considers the existence of other small-scale hydroelectric equipment scattered throughout Hungduan. In this chapter, I specifically examine a particular small-scale hydropower initiative that never came into being in Hungduan. Similarly, this chapter addresses the rather short trail left behind by the proposal, wherein archival documents and the community members' own experience and accounts regarding the incomplete initiative were often truncated and spotty. It is in this chapter where I further discuss potentiality in regards to non-effects or the limiting and altogether avoidance of effects and activities in sustainable development. In fact, a key principle in sustainable development is the avoidance of lasting effects that would compromise environments and future generations' access and management of natural resources. Understanding the dynamic between short-term and long term expectations and possibilities require us to deal equally with what is 'there' and 'not there'.

While Chapter 5 focuses on the Ambangal Mini-hydro Plant Project, Chapter 6 is primarily concerned with heritage conservation interventions in the management of the Ifugao Rice Terraces. In this chapter, I elaborate further on the relationship between human and non-human potential through a discussion on Ifugao's distinction of 'good' over 'beauty'. I situate this analysis within discussions on the zoning and management of the Ifugao Rice Terraces. Integral to understanding these varying views (both in terms of vistas and perspectives), and their enactment, are the sociospatial relations constituted in the act of monitoring and mapping the Ifugao Rice Terraces. In the chapter, I especially delve into the process of mapping as a form of planning. In this way I elaborate on how orientations toward the future actually engender a multiplicity of present engagements. As I elaborate in this chapter, these engagements are constituted in varying notions of heritage.

The thesis concludes with a discussion on what a focus on local and temporal understandings of sustainability can contribute to an anthropology of sustainability. In doing so, I address the theoretical and epistemological concerns that have been featured in the analysis I provide in the thesis. Furthermore, it is in the conclusion where I more explicitly make connections between my idea of 'capacity-expansion' regarding local concepts and practices of sustainability and my consideration of 'capacity-building' as it is elaborated upon in development discourse.

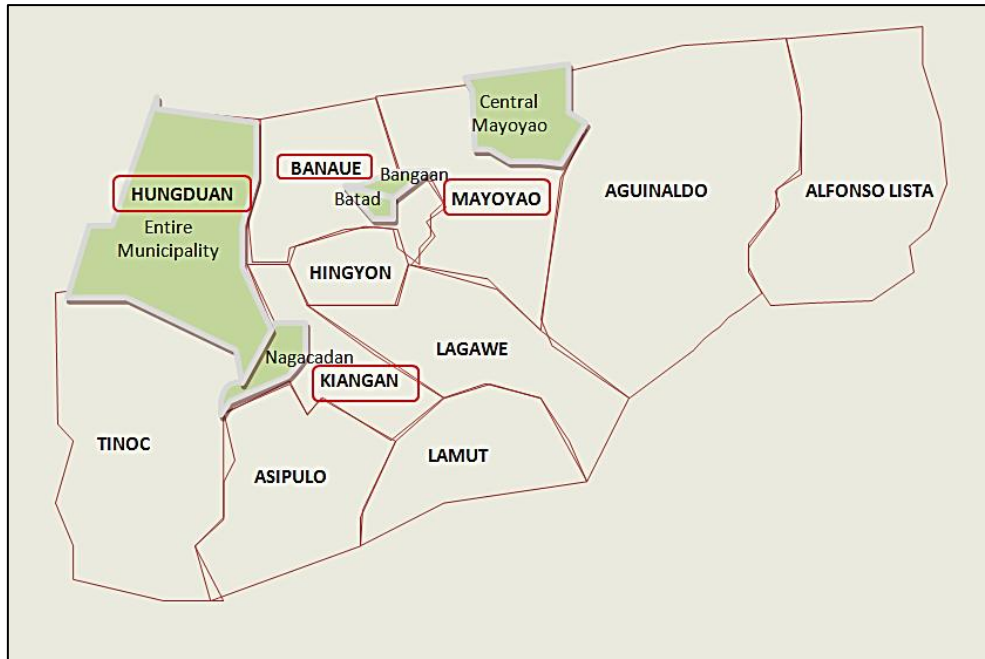


Map 1: Cordillera Administrative Region, Philippines
(The National Statistical Coordination Board, 1998)⁴



Map 2: Map of Ifugao municipalities

⁴ All figures, maps and photos are the author's unless otherwise noted



Map 3: Designated Rice Terraces of the Philippine Cordilleras heritage clusters
 Original map source: Rachel Guimbatan (in Save the Ifugao Terraces Movement, 2008: 17)

CHAPTER 1: ADAPTABLE PATHS

Exhibited at the Ifugao Museum is a Kiangnan family tree which traces the genealogy of Kiangnan residents born just after World War II, all the way up to early settlers of Bae, Kiangnan. The impressive family tree displays ancestry of different scales from households, *sitios* (hamlets), and villages. Yet, this tracing of genealogical ties is not simply for the benefit of a museum exhibit, but is rather constituted in people's daily lives. While living in the Guinid residence, amongst my family members is the 14-year old grandson of Auntie Doring, who at the time was in his final year of secondary school at St. Joseph High School. One of my brother's assignments was to create a family tree featuring both his maternal and paternal ancestors. I was told that such a project was perennially undertaken by high school students.

As he was conducting the project, out of curiosity, my Ifugao family wanted to know about my own genealogy. While Auntie Doring's grandchildren could easily go four generations back, I could only trace mine up to my grandparents. In fact, for many Ifugao youth, knowing the names of both sets of great grandparents is not met with difficulty, especially considering some children live with or have living great grandparents. Genealogies are treated as common knowledge in Ifugao, community members can trace not only their own relatives, but they know who other community members are related to. One's genealogy is regarded as everyday conversation similar to speaking about the weather. When speaking about their network of friends, my Ifugao siblings often make mention of how they are related to one course mate or another. At gatherings, even elders frequently recount their kinship relations with each other.

The constitution of one's ancestry in everyday engagements is emblematic of how in Ifugao, genealogy pervades all aspects of people's social life (Dulawan, 2001: 5), especially since all rituals for both people and rice, require ancestors to be invoked. This implies that the well-being of past, present and future kin are treated as a family affair and for which rice is essential. Additionally, rice plays a central role in the social structure of Ifugao society, which is rooted on a concept of solidarity linked to the cultivation and distribution of rice. In the cultivation and distribution

of rice, kin and extended kin, rally around a centre, the individual who inherited ancestral rice fields.

The ownership of rice fields is transient, so that possession of a rice field is more akin to stewardship, in which the land is safeguarded for future generations, and present possession is trivial compared to how long the land has been in the family. The sale of rice fields must be avoided, or if it cannot be avoided, must occur only within members who share an ancestor (parents or grandparents). As an elder asserted to me, "Any heirloom, any property, must not go out of the family circle," a sentiment that is shared by many. Additionally, *ma-ibuy* (family property), which includes rice fields, heirlooms and ancestral land, must be marked by a ritual (1919: 39). In requiring a ritual for the sale of *ma-ibuy*, it is not only living kin that are consulted, but likewise deceased ancestors. In this chapter, I address how maintenance of kinship ties is inseparable from the practice of rice-cultivation by considering the labour required in the cultivation and distribution of rice.

The significance of rice in kinship relations is not uncommon in Southeast Asian societies. In describing Kelabit society, Janowski notes that the shared consumption of rice together is fundamental to maintaining relationships within members of a hearth group, whereby biological kinship is made explicit through the sharing of rice meals (2007: 98). Ifugao in fact, did not have a practice of institutionalised political organization. Instead, each household participated in political, economic, and religious decision-making processes, especially since households were connected to a network of relationships that ties kin, hamlet and village members for support and alliance (Acabado, 2010: 197-8). Janowski refers to the organising principle of rice as 'rice-based kinship', whereby rice "constructs 'proper' human kinship" (Janowski, 1995: 87). In her study of women's rice cultivation in Langkawi, Carsten (1997) likewise highlights the importance of rice noting how, like the building of houses, rice-cultivation necessitates cooperation and reciprocal labour exchange amongst kin and affine (1997: 152).

As McKay points out, for Ifugao, ties are not to be taken for granted and are constantly maintained and validated through mutual accountability, especially the reciprocal exchange of labour and resources (2010). As I discuss in the chapter, the

relationships between households and work on the rice field is essential in understanding how community members expand their capacities. Capacity-expansion concerns matters regarding land tenure, inheritance and status. I contextualise these issues by particularly focusing on the role of primogeniture inheritance in creating solidarity and differentiation, and how this is integral to changing dynamics amongst siblings and about status.

The first section of this chapter particularly details the relationship between the house and the field. In this section, I draw on Acabado's recent suggestion of referring to Ifugao kinship as a 'rice-field' society (2010a: 190-1), an amendment of Levi-Strauss's (1983) concept of 'House Societies'. I situate Ifugao kinship within studies of kinship and siblingship in Southeast Asia. I especially tackle the way in which land tenure and inheritance creates both solidarity and class inequities amongst siblings, and the role of rice in mediating status and solidarity. Thus, the first section of the chapter also considers the importance of rice as a prestige crop. In doing so, I detail prestige rites in Ifugao and discuss the practice of feasting. In Ifugao, feasting is referred to as *hamul*, a public meal which is served after a ritual. Presently *hamul* describes any public meal that follows celebrations and community events. In the next chapter, I describe the practice in more detail.

Rather than simply take for granted the centrality of rice-fields in Ifugao kinship, in the second section of this chapter, I argue for an explicit attention to mobility and paths. I draw this out by further elaborating on the issue of mobility as it relates to primogeniture inheritance, and the flexibility of Ifugao residence which allowed younger siblings to seek out access to productive fields elsewhere. As I point out, this mobility, for which rice plays a central role, is significant in how households navigate expanding their access to resources and labour. Though even with these movements, the maintenance of kinship ties remains a priority. This responsibility is shared both by those who stay put and those who move. In my discussion, I draw from previous studies of movement in relation to kinship within Southeast Asia. In explicitly paying attention to these movements, I situate this discussion on kinship into wider contexts, especially regarding the link between migration and changing socioeconomic conditions.

In the discussions that follow, my aim is to provide an elaboration of Ifugao kinship system. I particularly take on Sahlin's notion of kinship systems as "a manifold of intersubjective participations, which is also to say, a network of mutualities of being" (Sahlins, 2013: 20). I add that it is likewise a mutuality of becoming. As I especially underscore in this chapter, this network of mutualities of being and becoming not only necessitates socio-spatial relations, they in fact unfold spatially. Moreover, the chapter introduces principles and practices of Ifugao capacity-expansion, which in fact relies not on stability, but on one's ability to navigate transformations. This chapter serves to evaluate a key principle of sustainability which concerns the availability and management of resources across generations. A focus on kinship prefaces the engagements and relationships that are featured in subsequent chapters, as people deliberate how to respond to instant and gradual transformations.

As I suggest, while the Ifugao may persistently face instantaneous and sometimes cataclysmic challenges, people have confidence in long-standing Ifugao tenets and practices as a way to manage these transformations. Such immediate and daily challenges, which are featured in subsequent chapters include: extreme weather, inadequate infrastructure or financial dilemmas. However, the resilience of particular Ifugao values and practices should not simply be seen as structural continuities. In his critique of anthropological approaches to Christianity, Robbins call attention to the tendency in anthropology to:

find some enduring cultural structure that persists underneath all the surface changes and, in the last analysis, serves to guide them and determine the sense they make—a sense that, in spite of whatever new elements might be part of it, should still be one displaying some continuities with those of the past (Robbins, 2007: 10)

Though, as I will elaborate upon in later chapters regarding funerary rites, rice cultivation and people's mobility, as people draw from Ifugao principles and practices, they likewise amend them. Such amendments are constituted in people's considerations over not just what to change but how to change. In her study of the Christian Bidayuh and their continuing, but dynamic relationship with animist rituals, Chua

makes a case for the ongoing importance of understanding continuity. Chua argues that a reflection on the “ethnographic and discursive manifestations” of continuity expands our understanding of discontinuity and the diverse and complex forms of conversion, particularly in regards to religion. Like Chua (2012), throughout this chapter, and the thesis as a whole, rather than take a viewpoint that is preoccupied with stability, I feature multiplicity and unpredictability. Particularly in this chapter, I build on theoretical approaches to potentiality and resilience to highlight adaptations and flexibility in the way kinship ties and rice are both cultivated and maintained.

THE HOUSE AND THE FIELD

As I previously noted, kinship ties are implicated in matters regarding the well-being of past, present and future kin. In well-being rites, both maternal and paternal ancestors are invoked in the *tonton* (the genealogy recited in rituals), indicating a bilateral kinship system, whereby an individual, “is equally related to both of his parents and then through them to both networks of blood kin” (Conklin, 1980: 5). While previous ethnographies have described Ifugao’s kinship system as bilateral, (Conklin, 1980; Kwiatkowski, 1998; McKay, 2012), Acabado (2010) calls for a re-evaluation of this taken-for-granted analysis. In rituals involving the transfer of land, only the ancestors from the parent transferring the land is called upon. As Acabado notes, ritual incantations regarding land inheritance are seemingly unilineal (2010a: 200). Though it may seem so, land inheritance actually does not rest on lineage, since the very property inherited from one’s mother, could actually have been inherited from the grandfather. According to customary law, inherited property is not jointly owned by spouses. Upon the death of a childless Ifugao, inherited property is returned the deceased’s surviving kin, usually siblings, and not the spouse. Similarly, while a child is equally related to both parents, when two individuals marry, though they are obligated to defend and assist each other’s kin, their first obligation is to their own kin.

In his analysis of Ifugao's self-organisation and web of relations, mainly regarding agriculture, Acabado (2010; 2012: 48) borrows Lévi-Strauss's concept of 'House Societies' (1983) in which kinship is apprehended in how, "local life inextricably meshes the ties that result from political and economic history...with the ties that are based on real or supposed genealogies" (1983: 171). In this case the house is:

a corporate body...made up of both material and immaterial wealth, which perpetuates itself through the transmission of its name, its goods, and its titles down a real or imaginary line, considered legitimate as long as this continuity can express itself in the language of kinship or of affinity and, most often, of both (174).

Acabado, however, modifies the 'House' concept by referring to Ifugao as a rice-field society, owing to the importance of the ritual rice field in the establishment and maintenance of social ties and organisation (2010a: 190-1).

The smallest family unit in Ifugao consists of an, "*ina* 'mother', an *ama* 'father', and one or more *agi* 'sibling(s)'" (Conklin, 1980: 6) residing in a *bale* (house). Spouses are referred to as *himbale*, while children are *imbale* deriving from the root word *bale*. Though *agi* denotes siblings, it likewise applies to cousins, while *tulang* refers to all collateral relatives (Barton, 1941: 540). An individual will often refer to an elder sibling or cousin using honorific terms. In Ifugao, such honorific terms are the borrowed Ilocano words, *manang* (older sister) and *manong* (older brother). In some cases, older peers will be addressed as such, even if they are not one's kin. In this way, the village becomes an extension of the house, and affinity is framed in terms of siblingship, as elaborated upon in Carsten's study of Malay kinship in Langkawi, Malaysia (1997).

The concept of 'House Societies' has been heavily discussed in anthropological research of societies in Southeast Asia (Errington, 1987; Carsten & Hugh-Jones, 1995; Carsten, 1997). In an edited volume which addresses the concept of 'House Societies' for Southeast Asia and South America, Carsten and Hugh-Jones, point out that 'kinship' comes from a multitude of relationships that are not solely about ties of blood (Carsten & Hugh-Jones, 1995: 19). Carsten and Hugh-Jones highlight the

need to foreground siblingship as a significant aspect of the 'House' concept. They additionally underscore an approach to 'kinship' that explores the establishment and maintenance of ties, through the joint conduct of daily and ritual activities (Carsten & Hugh-Jones, 1995; Carsten, 1997).

In her exploration of kinship among Malay in Langkawi, Carsten considers the centrality of "siblingship, houses and hearths" to relatedness, and for which the process of eating and cooking is crucial (1997: 108). As she argues, "houses are simultaneously bounded and porous. They have a single and multiple identity," framed in the terms of siblingship (130). Errington's study of marriage systems in Eastern Indonesia, point the relation between siblingship and the house, not to a sharing of bodily substances or subsistence, but to the sharing of *pusaka* (sacred heirlooms), for which houses are unified around the *pusaka* through the form of "worship communities" (Errington, 1987: 406). Drawing from the work of both Carsten and Errington, Retsikas's study on personhood in East Java, elaborates on siblingship in relation to "commensality and worship" (2012: 72). Retsikas illuminates how people who come to share a place do so in sharing food and ancestors (Retsikas, 2007; Retsikas, 2012). He further argues that the notion of 'House Societies' and siblingship should focus on the "multiple yet momentary manifestations of a relation and an institution," since it is precisely their ambiguity and flexibility that allow for their prevalence (2012: 72).

In this section, I extend this discussion to address how kinship is inextricable from the practice of rice-cultivation. I begin this discussion by first considering the practice of primogeniture inheritance, in relation to the labour required in cultivating rice and the maintenance of kinship ties. Rice lands and ritual heirlooms are therefore "limited to trust administration on behalf of the kinship group" (Medina, 2003: 25). Transfer of land by way of inheritance or sale are made explicit through rituals, but are not tangibly manifested through deeds and titles. Inherited rice fields are transferred upon the marriage ritual of a couple. Should a household be compelled to sell their rice fields for the purpose of sponsoring a funeral or healing ritual for an ill member of their immediate family, an *ibbuy* ritual is performed.

In performing the *ibbuy*, a feast is sponsored by the purchaser, which serves to validate the sale, since those participating in the ritual act as witnesses to the sale. This ritual is also necessary as a means of consulting not only with living kin, but likewise to gain the ancestors' permission to sell the land, as rituals invoke ancestors. As my acquaintances noted, when one sells inherited fields, it is not simply the land that is being transferred, but one's responsibility to the ancestors. It is for this reason that one sells to kin or extended kin, since selling to strangers would be transferring an ancestral duty that a stranger is not bound to uphold. Presently, community members resist selling to non-kin, and do not do so, unless having had explicit permission from parents or grandparents prior to death.

The importance of keeping family property within the family means that when married couple do not have heirs, the property of the deceased spouse reverts to his or her family, rather than being transferred to the living spouse. In such a case, a sibling or the sibling's heir gains ownership of the property. By having the oldest child, regardless of gender, inherit the bulk of the inherited property, especially rice fields, primogeniture inheritance prevented the fragmentation of rice fields into smaller holdings. Since the division and dispersal of land could erupt in conflict between siblings, allocating the lion share of properties to the eldest child was also meant to prevent rivalries regarding land. Previously, first-borns were encouraged (though not obligated) to marry fellow first-borns to consolidate and expand land holdings. As a result, the practice of primogeniture emerged in inequities amongst siblings and kin.

However, not being the eldest did not preclude younger siblings to cultivate fields in previously uncultivated areas of Ifugao. Since rice-fields were considered to be the most important of inherited properties, younger children, who did not inherit land, sought fields elsewhere. This autonomy for Ifugaos to seek their own fortune, even outside the proximity of their own households, shaped the Ifugao landscape and extended the range of the rice terraces. Amongst married couples, ambilocal residence is determined by proximity to the more productive rice-fields of the couple's individual inherited property (Conklin, 1980: 5; 2010: 49; Håkansson, 2014: 105). Therefore, *sitios* (hamlets) consists of households, whose agricultural fields

are within the same vicinity. This formed agricultural districts, which links neighbours together due to ecological concerns for their fields. As Conklin notes in his extensive study of Banaue rice-fields, agricultural districts are called *himpuntonā'an* (*himpuntonakan* in Kiangnan), with each district consisting of a centrally located *puntonā'an* (*puntonakan* in Kiangnan) (1980: 6).

Kin may be dispersed across several villages, and one's *himpuntonakan* (agricultural district) may in fact consist of non-kin and kin alike. The *puntonakan* is the ancestral, ritual plot and the most extensive rice field in the district. The owner of this field (male or female) is referred to as a *tumonak* or *muntonak*. In inheriting the rice field, an heir inherits the position of *tumonak* from the parent who has previously held the position. It is the *tumonak's* responsibility to sponsor the harvest ritual and thus provide a rice meal during the *hamul* following the harvest ritual. Farmers in a particular agricultural district, in their participation in agricultural rituals, commemorate an ancestor that may or may not be kin. Therefore, sharing contributions to a particular ancestral plot is inextricable to the sharing of responsibilities and benefits of rice cultivation. In this way, the caring for genealogical ties does not solely implicate households, but is extended to the well-being of the community.

Having a bulk of the family's resources, the eldest child had the responsibility to care for their siblings by way of providing labour opportunities and ensuring their access to resources, especially rice. Likewise, family private forests, as well as the previous practice of open access to abandoned swidden plots and to communal forests, provided supplementary food resource to kin without rice fields. In Ifugao, rice bridges kinship and status since organisation and compensation of labour is related to siblingship, in ways that define social stratification. Rice gives prestige to those with the capacity to undertake the resources and labour needed for its cultivation. However, its cultivation requires inclusivity, bringing individuals back for the organisation of labour to cultivate rice. In this way, individuals have access to both labour and resources.

The undertaking of feasts to achieve status is not uncommon in Southeast Asia, and has been highlighted by various authors. In her study of kinship and feasting among the Kelabit on the island of Borneo, Janowski reflects on the role of rice in

establishing kinship and generating prestige, through the daily sharing of rice and the distribution of rice in feasts (Janowski, 1995: 99). The sharing of rice on both a household and community scale depicts the leading couple's capacity to organise the investment and labour necessary for the cultivation of rice (Janowski, 2007). In Vietnam, as Condominas elaborates "the status of *kuang*, or potent man" is achieved, not simply through the amassing of wealth, but through sacrificial offerings which transform "the goods accumulated in buffaloes into...the furnishings necessary for the festival" (1972: 204). Volkman particularly examines the way funerary feasts allow former slaves, who have acquired wealth through education and work abroad, to elevate the status of their "traditionally low-status relatives" (Volkman, 1985: 6).

In Ifugao, status is achieved in rituals through the adequate production of rice which allows a family to not only consume rice on a regular basis, but to also distribute rice in feasts. While rice plays a central role in Ifugao societies, it must be noted that previously, *camotes* (sweet potatoes) were consumed in greater ratio than rice, and serves as a chief food (Barton, 1922; Brosius, 1988). This is due to the fact that *camote* is a low maintenance crop that does not need fertile soil, and are of little problem where pests are concerned. Rice on the other hand, is a high maintenance crop and requires constant care, irrigation and fertilisation. This comparison is necessary to illustrate how rice ownership and consumption establishes status.

Villaverde's account of Ifugao society depicts the distinction of rice in comparison to the *camote*, in which he states:

Sweet potatoes, which grow everywhere, even in mountains which are extremely rugged, are the reliance of the lazy....he who has it considers that he has lowered himself if he plants sweet potatoes (1909 in Brosius, 1988: 97).

Due to the difficulty associated with the cultivation of rice, a great number of religious feasts are needed to ensure good weather for the crops (Barton, 1922). Feasts related to rice cultivation serve to establish status, and maintains the reciprocal relationship between the *kadangyan*, the wealthy class, and the *nawotwot*, the lower class. Those with rice fields depend on an extended network of kin for labour, and

those without fields in turn, rely on leading households for rice (Barton, 1922; Kwiatkowski, 1999; McKay, 2003).

The fact that rice is difficult to cultivate and requires a great deal of labour for its production may be the reason for its prestige. As Brosius notes, it is not necessary for Ifugaos to undertake such a laborious activity, considering a simpler alternative crop, such as the *camote*, is available (1988: 101). In this case, the value attributed to rice is also a matter of taste and distinction, in which, “Social subjects, classified by their classifications, distinguish themselves by the distinctions they make, between the beautiful and the ugly, the distinguished and the vulgar” (Bourdieu, 1999 [1979]: 5-6). In fact, to many Ifugaos, the taste and aroma of indigenous rice varieties are considered to be of far better quality than high yielding rice varieties. Further in the thesis I note how rice has become artisanal food products for the tourism market. In this way, those who consume rice are considered to be consuming foodstuff of greater quality befitting of their class.

Ifugaos identify three social classes: “*kadangyan* (wealthy), *tagu* (commoners, including children and immediate relatives of the *kadangyan* who did not perform any of the prestige feasts), and the *nawotwot* (the poor)” (Dulawan, 2001: 7). These distinctions are identified through material wealth, such as gongs, granaries, heirlooms, livestock, and agricultural properties, for which rice fields are perceived as the most valuable possessions. However, material wealth on its own is not automatically associated with the *kadangyan* status. To become a *kadangyan* one must sponsor at minimum the *uya* ritual (marriage feast), whilst the sponsoring of a *hagabi*, a solid wooden lounging bench, is considered the ultimate prestige ritual. Compared to Kiangnan, in Hungduan, there are more prior steps required before performing a *hagabi*. With fewer stages to undertake, more people in Kiangnan were able to perform the *hagabi*.

Households, who possess a *hagabi* will often have the bench placed outside their veranda or in their living room. The *hagabi* is specific to the Tuwali region of Ifugao, which includes Kiangnan, Hungduan, Asipulo and parts of Banaue, Hingyon and Lagawe. Both ends of the large bench are marked by a carved figure of a pig or buffalo’s head. These animals are an important ritual offering, particularly in funer-

ary arrangements, as I note in the next chapter. The seat of the bench is bent at a slight angle, with both sides of the bench meeting to an apex at midpoint. A *hagabi* is meant to be utilised in everyday occasions, and people do in fact use them presently.

The construction of a *hagabi* necessitates recruitment of male kin to travel to a distant family forest, hew a large *narra* tree into a bench, and carry the bench from the forest to the sponsor's house. Every stage of the *hagabi* ritual requires sacrificial offerings. Even prior to sponsoring the ritual, chickens are sacrificed to determine whether the gods are favourable to the endeavour. For every village passed from the forest to the sponsor's home, a feast must be offered to the community, which entails the butchering of a pig or buffalo (Dulawan, 2005: 37). In doing so, sponsors provide for hamlets where kin may reside.

However, due to changing land use practices, an increase in population and the shifting needs of Ifugaos, the *hagabi* ritual is no longer prevalent. In regards to land use, as Sajor's historical detailing of agricultural practices in the Kiangnan village of Duit highlights, seed dispersals for commercial vegetable gardening (i.e. beans) and commercial fruit orchards (i.e. citrus), contributed to the increasing commoditisation of coffee, timber, fruit and vegetables throughout the 70s and 80s (1998: 166-169). What arose was ever increasing conversion of family-owned forests into groves and swidden fields (1998: 163-164). On the other hand, in his description of the ritual as practiced in the 1950s, Baguilat noted that the presence of roads and automobiles has lessened the excitement of the ritual (Baguilat, 1958: 208-9).

Additionally, as I draw out in this chapter, economic and educational opportunities expanded avenues to gaining status, so that ritual status sit alongside professional and political status, without necessarily being conflated with one another. These opportunities are particularly salient to the changing dynamics amongst siblings, especially in relation to the previous practice of primogeniture inheritance. For presently, younger siblings by way of their professional achievements may have a higher social standing than elder siblings. While elaborate prestige rites such as the *hagabi* may no longer be prevalent, ritual status still figure in funerary rituals. In the next chapter, I particularly note how funerary rites are constituted in Ifugao's

contemporary attitudes on wealth and status and the expansion of kinship ties in relation to mobility and access to resources.

While rice generates prestige, it maintains kinship ties through the sharing of everyday rice meals and the distribution of rice in feasts (Janowski, 1995: 99). Among the Kelabit, the provision of rice illustrates the leading couple's ability to organise the labour necessary to provide members of the longhouse with rice; feasts represent the sharing of rice meals on a grander scale (Janowski, 1995). In Ifugao society, the undertaking of a *hamul* is what mediates the contradiction between seeking status and establishing solidarity. While feasting produces social stratification, this is achieved in an inclusive manner, since feasts draw as many individuals back into the descent group.

However, solidarity can be undermined by people's responsibilities towards ancestors, and the way this impacts land tenure. The community's elites can acquire more land by sponsoring obligatory rites. When a person dies, a member of his or her kin is obligated to perform a *kate* (death rites) (Dulawan, 2005: 31). The member of a kin group who can fund the *kate*, takes rice paddies from the deceased person's estate as collateral. A person who is not an heir of the deceased person can thus usurp land and accrue debts from the appropriate heirs. Consequently, children of the deceased can be disinherited, "since without their ancestral lands, they usually cannot generate sufficient wealth to repay the debt" (Wiber, 1991: 475). Primogeniture inheritance was meant to strengthen ties between kin; however, it provides a cultural justification of exploitive actions (Meillassoux, 2005 [1978]: 167). Those who act in such a manner incur the judgment of community members and their behaviour is seen by many as alienating. In particular, community members in Kiangnan have been quite critical of one man's action in expanding his family's land holdings, for his desire to have his family's mansion sit isolated on a hill.

Indeed, the inequities that emerge from such land distribution and transmission practices challenge the picture of communities as being stable and united (Hanna & Jentoft, 1996: 46). Just as mobility was central to how earlier generations of Ifugao subverted inheritance practices that favours older sibling, movement beyond one's village continues to be how people expand opportunities. Concerns for

management of the Ifugao Rice Terraces include transformation in land-use, out-migration and the youth's waning interest in agricultural activities (e8, 2010: 11). While these may be valid concerns, such issues do not necessarily suggest a rejection or abandonment of Ifugao customs.

Actually, remittances from Ifugao working overseas or in Manila and other parts of Philippines become a way for non-heirs to reconfigure previous class structures. In fact, primogeniture inheritance is waning, and more and more parents with property more equally divide property amongst their heir. Though, what remains is a principle of solidarity and stewardship which becomes even more significant. As people move far beyond their natal village and work beyond the rice fields, they also require more support. In these changing dynamics, the cultivation and sharing of rice remains essential, as I show in the next section, which focuses on access to resources and mobility. By understanding Ifugao's capacity expansion, it becomes clear that how people sustain values and practices should not be perceived as a preservation of the past. Instead we should be paying greater attention to understanding how people undertake a "distinctive way of changing" (Sahlins, 1992: 36).

ACCESS AND MOBILITY

As Sahlins suggests, if we consider kinship systems "a network of mutualities of being" then places share "intersubjective relations with its human processors," so that people have a certain kinship with places (Sahlins, 2013: 6). The link between rice and people, especially in regards to mobility, is reflected in the way people talk about what people returned to after evacuating their villages during World War II. Apo Talin, when speaking about the end of World War II, never fails to mention that her return to her village was met with the sight of corpses and destroyed fields. In fact, as many elders relate, even as war waged in Ifugao, people continued to cultivate rice. When people fled their villages to escape the violence, there were community members, often men, who would often sneak into the rice field at night to tend to them or to procure rice from household granaries, for the nourishment of their family and fellow community members. Kin and fellow village members were dou-

bly mourned since people not only coped with the death of their love ones, but likewise the loss of fields that families and village members alike invested in, with some risking their lives to do so. Reconstruction of Ifugao after the war required simultaneously work for the dead and cultivation of rice, which implicates family members across generations.

Amidst people's engagement with devastating events such as the one I describe above, practices of solidarity and stewardship are undertaken, as people are faced with the need to sustain present and future family members. Earlier in this chapter I have noted the need to explicitly pay attention to mobility in understanding Ifugao kinship. While the concept of 'House Society' and Acabado's (2010a) utilization of the concept are useful ideas in thinking about Ifugao kinship, I must emphasise that maintaining kinship ties, requires the maintenance of paths. Recognizing the role of paths reveals the mutual capacity of rice and people in sustaining kin and kinship ties. Similarly, a focus on mobility demonstrates the active role of place in the formation subjectivities and social relations (Retsikas, 2007: 982; Allerton, 2013). Reciprocally, a place owes its character "to the experiences it affords...the kinds of activities in which its inhabitants engage in" (Ingold, 2000: 20). In this way, places are "continually coming into being" (Ingold, 2007: 28) and are 'formative and transformative' (ibid).¹

Since the establishment of kinship and status rely on property and labour, it is essential to consider how social relations produced in rice-cultivation unfold spatially. This consideration will be addressed through an exploration of land inheritance and tenure practices in the Ifugao Province, where rice fields is of greatest concern and in which genealogies play a central role. As previously mentioned, Ifugaos practiced a law of primogeniture, in order to prevent the fragmentation of rice fields and property-related conflicts between siblings and to ensure that rice fields stay within the family. While this practice should establish solidarity amongst kin, it nevertheless created social stratification. In the Ifugao, ownership of land is generally established through *primus occupantis*, whereby the first person to clear land and

¹ These ideas were also presented in my MA Dissertation (Cagat, 2010: 6, 15)

invest labour on it, gains ownership of the land. Ownership of rice fields and private forests are considered perpetual. Thus, although another individual may till land that is abandoned, they may only do so for as many years that the field or forest has been left abandoned, before ownership returns to the true owner (Barton, 1919: 42). However, enterprising individuals can move to areas with uncultivated land to establish rice fields, thus resulting in the diffusion of siblings.

This dispersal of kin across different hamlets allows for the expansion of access to both resources and labour. Since siblings from the same household could in fact, be dispersed across nearby hamlets or villages, kin may be part of differing *himpuntonā'an* (agricultural districts). As I described earlier, each district consists of a *puntonā'an*, ritual field to be planted and harvested first. This field is owned by the *tumonak*, who sponsors the harvest feasts. The *tumonak* is a *kadangyan*, and the wealthiest household of their agricultural district. The position is inherited by the first born child (regardless of gender) from their parent. The link between rice and status is reflected in the sacrifices made during agricultural rites. Sacrifices performed by the wealthy also benefit neighbouring fields. For instance, when the *tumonak* first plants on the ritual plot, they must sponsor sacrificial offerings. Though the neighbouring fields benefit from such ritual offerings, they are not required to contribute to the ritual's expense but contribute in labour instead. At harvest time, workers are also served a lunch meal and are compensated with a bundle of rice.

Membership in an agricultural district involves sharing obligations in maintaining irrigation sources, and providing group work called *ubbu* especially at harvest time. *Ubbu* is a cooperative labour arrangement in which labour is reciprocated with similar work. For instance, one group may harvest for one farmer, and that individual will reciprocate this labour for farmers of other fields. Similarly, when neighbours are in need of assistance, co-residents perform *baddang* in both ritual and mundane activities. While *ubbu* denotes shared labour, *baddang* denotes aid that is reciprocated with support by way of resource, for instance when those who assist in a task are provided with a meal. *Abono* and *Dang-a* are both labour that is

done voluntarily for free, in particular, the *dang-a* is usually undertaken for moving lumber to and from a site.

Siblings who do not reside in the same agricultural district can recruit the help not only of their co-residents in their agricultural district, but also those of their siblings in another district. Thus, *ubbu* is “regulated by kinship and territorial affiliation” (Acabado, 2010a: 50). Though as Conklin (1980) and Acabado (2010a) highlights, while non-kin relations may be maintained for ecological concerns over rice-fields, they are not prioritised over kinship ties especially in cases of litigation and indemnities (1980: 5; 2010: 49). In Conklin’s seminal ethnography on village organisation, he demonstrates that hamlets populations may be segregated into kin groups, for political, economic and ritual affairs (1980: 6). As Conklin describes, “the closest families in adjacent or neighboring hamlets are those in which at least one senior member of each household is related to the other as parent, child, or sibling” (1980: 83). As such, “close blood-kin tie, propinquity, and shared access to crucial natural resources affect interpersonal and intergroup relations” (1980: 36).

Such intergroup relations were shaped by the movement of siblings resulting in the dispersal of kin. In speaking of mobility, I take a cue from Allerton’s study of Mangarrai sociality in Flores, Indonesia and her elaboration of kinship as ‘path-based’ (2013: 75). While the concept of ‘House Societies’ may be useful in understanding Ifugao relatedness, Allerton points to the shortcomings on taking for granted the notion of ‘house-based’ societies (2013: 96). She suggests that both settlement and mobility is constituted in kinship ties. Thus, as Allerton suggests, just as much as relatedness is ‘house-based’ it is also ‘paths-based. Allerton calls for the need to understand paths not simply as “metaphoric representations,” but rather, the actual mobility inextricable to the establishment and maintenance of social ties. Specifically, she illuminates this idea through her reflection on marriage paths as not simply symbolic links, but likewise, “the ‘real,’ muddy trails through forests and rice fields” (Allerton, 2013: 74). Allerton highlights that such travels along pathways, “creates both a physical trail and an alliance relationship” (2013: 82).

As Allerton mentions, movement in relation to kinship is not a novel idea, and particularly highlights the work of Rosaldo (2013: 75). In this case, Rosaldo

considers the importance of walking, following and leading in regards to the actualisation of kinship among the Ilongots in Philippines (1980: 178). Aside from Allerton's analysis, Retsikas likewise points out the saliency of mobility in understanding kinship. Particularly, he addresses migration in relation to the incorporation of Javanese or Madurese ancestors in rituals. In this case, third-generation residents of Alas Niser in East Java, render, "kinship connections with people in Madura and ancestral origin places in Java out of memory's reach," and thus, feel no need to commemorate such ancestors in funerary feasts (2012: 114). Unlike the case in Madura, I note that in Ifugao, despite and because of migration, people make sure to remember and commemorate ancestors. This acknowledgment and remembrance is essential to the well-being of both ancestors and descendants, as despite their move away from their natal village they maintain access to kin elsewhere. In the same manner, people are reeled back into the kin group whenever assistance is required, particularly for rituals, be it agriculture or funerary.

In rituals, which necessarily involve the remembrance of ancestors, animal offerings are also constituted in kinship, since the uncooked meat is distributed to kin, depending on their relation to the deceased and their contribution to the funeral. The cooked meat on the other hand is served at the *hamul* and distributed to all the community members who attend the funeral. The portion of rice in relation to the proportion of meat sacrificed also demonstrate rice as a prestige crop, since the more rice needed for the *hamul*, usually means the more rice fields the sponsor owns or the more rice they can afford in terms of ritual expenses. Besides covering distances to attend *hamul*, food likewise travels to be distributed to appropriate kin members. I am referring specifically to the practice of *bolwat*, or the distribution of meat from mortuary ritual offerings. I further detail the significance of these offerings in the next chapter, which focuses on funerals. I briefly mention it in this chapter to demonstrate how resources are distributed among kin despite distances, and how the maintenance of kinship ties very literally involves paths.

Aside from the distribution of meat in relation to the distances between kin, rice not only elicits movement, but rice itself moves as people move. In Ifugao, it is not uncommon for parents to send sacks of rice to their children residing outside of

the municipality or even the province. Auntie Doring once in a while would summon her nephew to hire a tricycle in order to take sacks of rice to the bus station, which can then be transported to Baguio where two of her sons reside. Similarly, a friend receives rice from fields he owns in Batad, Banaue, which he inherited from his paternal grandmother. Rice sacks being loaded up in buses or being couriered by tricycles is in fact not an uncommon sight in Kiangnan. On the other hand, upward mobility is made possible through the transfer of land from one household to another household. As an elder related, though his son was supposed to inherit some rice fields, the son preferred to sell the fields to fund the construction of a house elsewhere in the province. This required the parent to seek another family member who could buy the property. The sale of the fields allows not only for the upward mobility of the elder's son, but likewise for the opportunity of an extended kin to acquire private lands.

Kinship ties require maintenance, and their upkeep is indelibly linked to how people expand their access to resources and increase their mobility in ways that implicate the well-being of kin across generations. Maintaining kinship ties become even more necessary as people move to farther locales for academic or job opportunities. Ifugao, who migrate for work, to other parts of Philippines, Southeast Asia, North America or Europe, leave their children ideally under the care of the grandparents. When this is not possible, children may be left with the siblings or cousins of their parents. In my own household, Auntie Doring was a guardian for her nephew, whose mother worked in Singapore. Similarly, Auntie Doring's granddaughter, for a time, lived with her uncle in a different municipality to attend a prestigious high school. The practice of grandparents raising their grandchildren is likewise prevalent in Ifugao, and many of Auntie Doring's friends were guardians of their grandchildren. In fact, many of the youth in effect have more than one 'home' in their village, as they may live with their grandparents or cousins, rather than their own home. For those that live abroad, kin networks become a means of needed support in a new country, or they become a way to receive goods from back home. When individuals return to Ifugao, relatives will give them items to pass on to other relatives. Likewise, kin financial resources are pooled together to pay the exorbitant

fees needed to pay agency fees necessary for people to work overseas, or for a member of the family to attend university.

Despite distances, those who move away continue to be encompassed in the cultivation and sharing of rice. Remittances may contribute to the reconfiguration of previous class structures through emerging possibilities of rice-field ownership. Likewise, opportunities to purchase land are made possible in part by a landowners' own migration and inability to tend to fields. Additionally, people's return to Ifugao and attendance of key familial occasions (i.e. funerals, engagements, marriages, baptisms, etc) or community events (Ifugao Day and municipal festivals) keeps the practice of *hamul* thriving. My neighbour, manang Doreen actually alerted me to the fact that there are particular months when rituals are more likely to be carried out (pertaining also to other rituals such as engagements and marriages). As I experienced it, the season usually occurs in Philippines' summer months (February to March) or in the holiday season from December to January, when *Balikbayans*² (overseas Filipinos returning to Philippines for a visit or to re-settle in the country) are more likely to be around in the province.

During such seasons, so many households host a *hamul* that one can go the entire day not eating at home, but rather, jump from one *hamul* to another. Community members have jokingly referred to it as *hamul* season. In fact, those living abroad are expected to contribute financially to rituals, especially funerals, as I discuss in the next chapter. The *hamul* is open to all members of the community, and normally during a day of the *hamul*, people who pass each other in the street will often say *Makihamul*, or *Mak'a makihamul*. Interestingly, in the early days of my fieldwork, I found that only when I was walking with a community member, was I greeted this way. However, even when I was walking alone, people were still keen on informing me that there is a feast happening at a 'neighbour's' house. After having resided in Ifugao for a while, I did begin to be greeted with the Tawali phrase for a *hamul* invitation, even as I was walking by myself. Though I must point out that for me, an open invitation for a *hamul* even as I walked alone, only occurred within the

² This term combines the Tagalog words for return (*balik*) and town (*bayan*).

confines of Kiangnan. Though, for the Ifugaos, no matter what village they're walking through, they are greeted with being invited to *hamul*. Once, while walking to the mini-hydro plant with the plant supervisor, we were greeted with such an invitation, despite the fact that the plant supervisor was from Hingyon and we were walking through Lagawe.

In his study of kinship amongst the Nikgini-speaking people, Leach suggests, "The processes whereby persons and places come into being through work elicit specific relationships, just as they invoke specific places" (2003: 24). In Ifugao, previous dispersal of kin across landscape extended the span of rice terraces to many locales. The creation of these rice terraces established agricultural districts whereby neighbours mutually commemorate each other's ancestors by sharing in the work of rice cultivation and participation in rituals that implicate both living and dead kin. Similarly, this mobility has expanded what people identify as community and who they identify as a fellow community member. More currently, as kin disperse across greater distances, kinship ties that are now transnational continue to shape the Ifugao landscape, as remittances contribute to expenses for rice cultivation, the purchase of land and construction of houses.

Focusing on movement and settlement reveals the salient link between the cultivation of rice and the maintenance of kinship ties. Likewise, it demonstrates the way in which people and places simultaneously shape the relations which encompass them. In the case of Ifugao, I note how travel, particularly due to the dispersal of kin, is significant both to the organisation of agricultural activities and to the work that ensures the well-being of kin across generations. In the next chapter, I further this discussion by focusing on kinship ties involving deceased kin. I especially elaborate upon the way kinship ties encompass the afterlife, so that issues of distances between kin involve earthly and otherworldly places. As in this chapter, the next chapter examines access to resources and mobility in relation to well-being. I likewise continue to address Ifugao's consideration of status and solidarity.

In this chapter and the two that follows, I want to highlight the relationship between change and continuity, paying particular attention to the historical context of land rights, rice agriculture, and Christianisation in Ifugao. Throughout these

chapters, I keep in mind Keane's suggestion that concepts of continuity are inextricable to notions about transformations "and the stances toward the future they make possible" (2007: 146). I further delve into transformations in Ifugao subjectivities as they grapple with religious conversions, changing class structures, the challenges of rice cultivation and aspirations for rural development. I link these aforementioned matters with the maintenance and expansion of kinship ties, as they relate to the management of resources and the mobility of both humans and non-humans.

CHAPTER 2: WELL-BEING MATTERS

As classified by an Ifugao elder, Manuel Dulawan, among the categories of rites in Ifugao are: *hongan' di page* (agricultural rituals), the *hongan' di kitaguwan* (well-being and prestige rites), and the *udum an mabaki* (spells and sorcery) (2005: 27). As I have mentioned in the previous chapter, agricultural activities are tied to matters regarding well-being and prestige. A more detailed exploration of agricultural rites will be discussed in a subsequent chapter. Well-being rites include rituals which mark particular stages in an Ifugao's life: birth, engagement, marriage, pregnancy, and eventually, death. Prestige rites involve the stages of rituals necessary for attaining social status. In everyday conversation, Ifugaos do not actually use the Tawali terms mentioned above. People instead, refer to the specific name of a ritual or they may simply call them *honga*, a ritual that requires sacrifice. As such, *honga* implies that rituals made for the sake of one's well-being require sacrificial offerings. *Honga* refers to rituals undertaken for the sick and the dead, along with prestige and agricultural rites. In this chapter, I specifically refer to *honga* undertaken for the dead and the sick.

Since this chapter focuses on well-being rituals, it is necessary to state how I define well-being within the context of my interlocutor's experience and expressions. In his analysis of poverty, Appadurai suggested that well-being can be defined as one's capacity to flexibly experiment with various circumstances. As Appadurai notes, the privileged can draw from an "archive of concrete experiments" to navigate the paths for their hopes and desires, while the less privilege have, "fewer experiments and less easy archiving of alternative futures" (2004: 69). For the Ifugao, well-being does not necessarily mean living luxuriously, but at the very least, it means being able to adapt to circumstances without serious threats to an individual's (and their descendant's) health, safety and dignity. For the Ifugao, well-being is expressed in the importance they place on rice fields for the prosperity of subsequent generations. In their reasoning for why agricultural activities remain vital, farmers conveyed that despite the youth's disinterest in it, even if the next generation fail in their endeavours outside of Ifugao, they can return to Ifugao, and at the

very least, still have access to resources. Resources in this case not only point to natural resources, but also being close to immediate or extended kin who would be available in providing assistance.

My aim is to reflect on the centrality of kin relations in Ifugao concepts of well-being and the way this is embodied in a *hongga*, especially in the work undertaken for the dead and living kin who are afflicted with illnesses. As I suggest, a focus on matters of well-being considers how well-being rites are invaluable to the expansion of kinship relations, particularly in light of changing religious practices, ideas about status and the broadening of kinship ties in relation to mobility. In this chapter, I specifically refer to a *hongga* performed for *apo* Talin and wakes I attended in Kiangnan. Similarly, I address the carrying out of novenas¹, in conjunction with Ifugao funerals and when individuals are afflicted with injuries and illnesses. In these accounts, what I want to feature is how the Ifugao's concern for well-being and practices for its maintenance encapsulate how the living negotiates kinship ties even as descendants become different spiritual subjects than that of their ancestors. In doing so, I consider the mutual care deceased and living kin give each other. I especially reflect on how kin relations are implicated in people's changing subjectivities and its significance to the broadening of kinship ties and spiritual networks in relation to people's mobility.

In the previous chapter, I focus on kinship between living kin, especially in relation to people's movement across distances. In this chapter, I extend this discussion by considering kinship in relation to movement between the earthly and spirit realms as the living negotiate both with ancestors and deities. As I suggest, such negotiations are not simply for the request of the living, but likewise to serve the requests of the departed. While the dead intercede for the well-being of living kin, this care is reciprocal, as living kin are depended on for the dead's transition to the after-life. This chapter addresses Ifugao personhood, and the ways in which kinship ties are reconfigured in the Ifugaos' changing subjectivities. Here, I reflect on the role well-being rites play in how moral obligations towards kin are entangled in decision

¹ The praying of the rosary conducted for nine days

making processes in consideration of changing religious practices and ideas about status.

The observance of Ifugao religion (pantheistic, defined by a contractual agreement between the living and a host of deities and ancestors), alongside Christianity, may incline readers to search for a discussion on syncretism, which this thesis does not fully engage in. While I do not rigorously engage with anthropological approaches to syncretism, its conceptualisation has value to a thesis which draws from ideas on potentiality and resilience as they relate to sustainability. In the volume titled, *Syncretism/Anti-Syncretism: The Politics of Religious Synthesis*, Stewart and Shaw re-evaluate syncretism, and highlight the contentious nature of the concept. As they argue, syncretism is not a “fixed meaning” (1994: 7). Instead, religions “are continually reconstructed through ongoing processes of synthesis and erasure” (ibid). In one of the volume’s essays, Werbner proposes that this ‘synthesis’ and ‘erasure’ presents syncretism as, “a continually contested social action,” a re-invention of religious principles and practices (1994: 212). In this chapter and the subsequent, I account for the historical context of these transformations that go beyond religion.

Focusing on dynamic spiritual practices in regards to how people aspire for health and prosperity likewise serves as a critique on the inadequate consideration of religion within discourses of aid and development programmes. In her study of faith-based humanitarian aid, Bornstein explores the significant role religion plays in economic development programs in Zimbabwe. Bornstein contends that the spiritual realm of people’s social life is not adequately addressed in discourses regarding aid and development. The separation is untenable, since cosmologies connect spiritual and material realms and are “integral to the processes through which individuals order their worlds and make sense of experience” (Bornstein, 2003: 2). As Bornstein underscore, spiritual practices “provides explanations of people’s lived experiences in moral terms,” especially in moments of change (172). In this case, sustainability is not simply about the appropriate management of an environment, but likewise refers to people’s “commitment to the social institutions that have and will sustain communities” (Cochrane, 2013: 122).

By focusing on well-being rites and how Christian and Ifugao values are adapted in the work undertaken for the dead and those suffering with illness, I contribute to further understanding Ifugao conceptualisations of sustainability. As I consider in this chapter, the carrying out of a *hongga* reveal how kinship ties expands people's social networks to include deceased kin. Though, as I detail in the chapter, this is not without complications, since the maintenance of such ties require work and resources. *Hongga*, *novenas* and funerals demonstrate local notions and practices that require a redefinition of what in development planning term is referred to as 'stakeholders'. In Ifugao, 'stakeholders' as it relates to sustainability is not restricted to present and future inhabitants, but necessarily includes past inhabitants, in this case, the departed. As I will address in the last section of this chapter, a look at religious adaptations in well-being rites, shed light on how deceased kin play an active role in how people engage with social and environmental transformations, especially in regards to the well-being of kin across generations.

I must note that my interest in funerals only came about after realising that funerals were a frequent occurrence in Kiangnan, and attending various stages of the funerary ritual was part of my experience of living in the municipality. In fact, during my residence in Kiangnan, there seems to have been more funerals than any other household occasions (including birthdays and weddings). To clarify, *kate* (death) rites are multi-day occasions, for those with elite status funerals could be more than a week-long event. The key stages for mortuary rituals are the carrying out of the *bohwat*, *katlu*² and the burial. It is during these days when wakes are followed by feasting where the meat of sacrificial offerings, such as pigs are served to attendees. When attending funerals, community members particularly refer to the day of the wake they are attending. For instance, if attending the first day of the *kate* rite, my interlocutors will directly refer to it as the *bohwat*. While people (including myself) may not attend every stage of the funeral for the entire duration of the occasion, many will attempt to attend key funerary stages (first day of the wake, third day or

² Some of the words for a particular stage in the funerary ritual are a portmanteau of the Tuvuli word *kate* (death) and the number of days since the person has died. For example, *katlu*, the third day of the wake, is *kate* (death) and *tulu* (three/third) combined; the fifth day of the wake is *kalima*, which is *kate* and *lima* (five/fifth) combined.

the actual burial day). I detail the importance of these days throughout this chapter, especially in relation to sacrificial offerings and feasting.

While I frequented many wakes in accordance with the stages of funerary rites, I do not have direct experience on the preparations that people undertake prior to the funeral, for instance: how people procure pigs (or buffalos) for the sacrificial offerings, buy blankets, negotiate expenses, recruit labour, prepare the corpses to be placed in coffins or arrange grave cleanings for the *bogwah*, an Ifugao's second funeral. Much of my analysis on preparations for funerals comes from my interlocutors' account of previous preparations they have undertaken for sponsoring a funeral for a kin. My experience in Kiangnan was largely shaped by the presence of Catholic practices in household and community matters. In fact, the funerary wakes I attended was characterised more by resembling masses, despite the fact that the butchering of pigs and the undertaking of the *hamul* made it distinct. As such, this chapter also delves into the syncretic practices of Ifugaos in Kiangnan. In doing so, I address the significance of kinship ties in Ifugao's dynamic spiritual activities.

GOD, DEITIES, SPIRITS AND SOULS

Ifugao derives from the word Ipugo which combines the prefix 'i' meaning 'from' and the word Pugaw (earth). The prefix 'i' followed by a place denotes an identity that is spatial, for example, a person from Hungduan will refer to themselves as *iHungduan*. Thus, to be Ifugao literally means to be from the earth. This distinguishes Ifugaos from spirits and deities who inhabit other realms, but who may come to interact with inhabitants of earth (Castro, 1983: 3). In Ifugao Religion, as has been documented by Barton (1946) and Lambrecht (1957), the universe is subdivided into five regions. Besides Pugaw, which is inhabited by 'earthmen', the other regions are the realm of deities and ancestral spirits, and these regions resemble the topography of Ifugao. Thus, the realm of the spirits and deities include a mountainous terrain with rivers, forests and rice terraces. The realms include Kabunyan (Skyworld), Pugaw (earthworld), and two realms along the river, Lagod

(Downstream) and Daiya (Upsream). Populating the earth, with humans are unseen spirits (also referred to as fairies) called *pinadings*, which can sometimes make themselves present to humans. These spirits particularly reside in trees, rocks and bodies of water. Such spirits can cause sickness or misfortune when disturbed, for instance, when particular places are excavated or when mature trees are cut.

Ancestors intercede between the humans and gods, and thus, are called upon in all endeavours of their descendants, which contribute to well-being, from health, safety, and prosperity. Encompassed in this wide umbrella of well-being are: agriculture, travels, and careers; along with milestones such as, marriage, the birth of a child and eventually death. Any possibility to attain successes in these endeavours is improved or disrupted based on one's maintenance of genealogical ties, particularly, one's responsibility to dead kin, hence the significance of funerary rituals. For this reason, the skills of a *mumbaki* who carries out rituals, is defined by their knowledge of an individual's genealogy. In her account of Ifugao culture, Lourdes Dulawan, an Ifugao elder, uses 'native priest' to describe a *mumbaki* (Dulawan, 2001: 28). My interlocutors sometimes referred to *mumbakis* as shamans, but more commonly referred to them as priests, using the English word.

When auntie Doring sponsored a specific *hongga* called a *pahang* for *apo* Talin, she had to request *mumbakis* from Ambabag who would have extensive knowledge of *apo* Talin's genealogy. Though, as many have mentioned, due to the advent of Christianity, and the lack of apprentices to become a *mumbaki*, people now have less choices of *mumbaki*. Due to the fact that a *mumbaki* must know the ritual sponsor's genealogy, people cannot request one from a distant village even within their own municipality, much less another Ifugao Province. The *mumbaki* do not request payment in performing rituals, but instead are compensated with cuts of meat. As agricultural and prestige rites wane, not only are *mumbakis* being required less, but also a system of exchange whereby spiritual labour is performed for meat is diminishing. However, *hongga* (outside that of prestige rites) continue to support the need for *mumbakis*.

The *pahang* is a *hongga* that is specific to the curing of illnesses, and also refers to a group of *soulstealing* deities that often are the cause of mysterious illnesses

and behaviour in people. The *pahang* was performed due to auntie Doring's worry that *apo* Talin was showing signs of restlessness. This is due to the fact that *apo* Talin was not following her daily routine, which at 90 years old is fairly regular. *Apo* Talin constantly wanted to roam around, always wanting to sweep the veranda or in general, not being able to sit still, it was as if she was constantly pacing and excitable. Through the transmission of knowledge, there are particular afflictions that Ifugaos can very easily distinguish as being the work of particular deities. Apo's soul has been stolen by deities that must be given sacrificial offerings in return for apo Talin's soul. In Ifugao religion, it is important that one's soul does not leave the body for this may lead to death.

On the morning of the *pahang*, we had to move furniture out of the kitchen, since the ritual was to take place in that room. Two of auntie's sons, one from Ambabag, and the other visiting from Lamut were there to help with the ritual preparations, which included the procurement of seven chickens for the sacrificial offerings. On the kitchen floor there were glass bottles of store-bought *baya* (rice wine) and a collection of *moma* (betelnuts) placed on a rice winnowing basket. Both items are gestures of goodwill, consumed while engaging with someone in a friendly manner. In having such items, the priests persuade the gods and ancestors to speak with them to listen to the supplications they make on behalf of auntie Doring and apo Talin.

Before the ritual invocation began, the two *mumbakis* began writing on a piece of paper a list of Apo's ancestors from both paternal and maternal sides. Likewise, the *mumbakis* were conferring with each other on how to divide up the work in speaking to the deities and ancestral spirits. The *mumbakis* then performed the ritual chant, periodically chewing *betelnuts* and drinking the *baya*. It is while their chewing and drinking the *baya* that a chicken is partly singed, brought in and its throat slit, drained of blood and then an incision is made to split the chicken open so that the bile sac can be inspected. This process was repeated until all the chickens were sacrificed. During this time, people are freely doing other things. Apo in fact was tending to the laundry, bringing in dry clothes from the clothesline to fold them, which I did as well at one point in the ritual. Once in a while auntie Doring would

attend to a text message, as the ritual was being carried out. All the while, the *mumbakis* remained unfazed continuing on with their chants.

The chant recited by the *mumbakis* is to call the deities and ancestors from the realm they are occupying and to possess the *mumbaki* so that the *mumbaki* may make a request on behalf of *apo* Talin. In fact, when the *mumbakis* are consuming *betelnut* and wine, it is not just that they are making a friendly gesture to the deities and ancestral spirits, but the deities and spirits are imbibing *baya* and chewing *betelnut* through the *mumbaki*. Similarly, in being invoked, the deities and spirits move through the spirit realm, as they are guided by the direction of the *mumbaki*. In fact, the invocations cross not only metaphysical boundaries, but spatiotemporal ones, since in directing the deities to auntie Doring's house the *mumbakis* may have to describe changes, so that the deities and the ancestors locate the place where the *mumbakis* are.

When the chickens are inspected, the *mumbaki* check to see if the bile sac is full and properly in place as this will confer that the deity for whom the chicken has been offered to has indeed been satisfied. In fact, all seven chickens showed good omen. However, if a chicken showed a bad omen, a *pahang* would be performed once again to give that particular deity a bigger offering, perhaps more chickens or a small pig. This act of negotiation characterizes the Ifugao's relationship with deities and ancestral spirits. When one offers a sacrifice, the expectation is that the request will be fulfilled, but there is always the potential for an unsatisfied deity. Involved in this negotiation are the ancestors, for it is them that can intercede between humans and deities. When the rituals are complete, the chickens are distributed, with the *mumbakis* getting their share.

Amongst the tenets of Ifugao religion is that life after death resembles the living world with the same environments, in this case terraced fields along with the natural features that characterised the world of the living. The dead require the same worldly needs as when they were alive. When such necessities are not met, or when the deceased are unwell in their afterlife, they can signal their dissatisfaction or discomfort by causing illness in the living (Dulawan, 2001: 29). Therefore, there is reciprocal exchange of care between the dead and the living. If the deceased are

cared for through the proper carrying out of funerary rituals, they can better intercede for the needs of their descendants. As I discuss in a later section, funerary rituals in Ifugao are not simply for the benefit of the dead, but also to ensure that descendants do not suffer, as a result of the discomfort faced by ancestors in their afterlife. Despite the carrying out of *hongga*, one cannot ignore the fact that Ifugaos predominantly identify themselves as Christians.

Since Kiangnan is predominantly Catholic, I can only speak of religious practices in regards to Catholicism. The inclusion of Catholic prayers in wakes affirms syncretism at play in Ifugao province. In her analysis on health and nutrition in Ifugao, Kwiatkowski notes that some Christian missions encouraged the idea of healing beyond biomedical practices. In this case, missionaries emphasised how prayers heal and conjure earthly prosperity (Kwiatkowski, 1998: 164). As Kwiatkowski claims, even in the 1950s, Ifugaos were simultaneously using Christianity, rituals and biomedicine for battling illnesses (ibid). While missionaries have historically discouraged Ifugaos from practicing well-being rituals, Kwiatkowski highlights that there was no consistency on the parishes' stance and positions shifted throughout the years (Kwiatkowski, 1998: 167).

Aside from access to services, conversion became tied to well-being by way of prayers, since prayers became a means to earthly prosperity, and can be deployed individually or collectively, at any time and any place. Within the landscape of religious conversion there were varying spaces for Ifugao rituals. While some parishes encouraged the continuance of rituals alongside Catholic customs, some strongly advised against any form of spiritual engagement outside that of the Catholic Church. However, those who discouraged the use of healing rituals, paradoxically, did not doubt or reject the possibility of illnesses and harm caused by spirits. Instead, converts now saw alternative ways of dealing with such harm through prayers and Christian paraphernalia. They saw themselves as, "protected from these evil spirits by their belief and faith in their Christian God" (Kwiatkowski, 1998: 174).

It must be noted that Christian practices, just as with Ifugao religion, acknowledges the presence of malicious spirits and unexplainable misfortune. However, Christian parishes argued for the power of prayer in keeping such harms at

bay. When it comes to illnesses, prayers are said to support biomedical treatments. Interestingly, in an essay written by Father Lambrecht, a Belgian missionary, he notes his disapproval for the Ifugao's funerary practices, and writes:

If Christianity can conquer that stronghold and succeed in eliminating the sacrifice of pigs and carabaos...it will have achieved the highest possible degree of integration (1963: 26).

Ironically, far from Lambrecht's aspiration, burials customs have not been abolished. Rather, showing mutual adaption from both the Ifugaos, and parishes, figures from the church presently participate in Ifugao funerals, while Ifugaos often fuse Christian services with Ifugao well-being rites (i.e. marriage and funerals).

Catholic followers of Kiangnan reconcile the pantheon of Ifugao deities and ancestral spirits, by treating them as local spirits in line with the chorus of Catholic saints and subsumed under a universal Christian God. However, the involvement of ancestors in one's spiritual life remains central. In Barton's own interpretation of Ifugao religion he notes that even when afflictions are caused by deities, this occurs with the ancestral spirit's knowledge and agreement (1946: 169). This is a result of the dead drawing the living's soul into the realm of the afterlife out of affection or requests from their living kin. Despite the pervasive conversion to Christianity, sentiments over ancestors' affection and requests as the cause of affliction remain. Particularly, affection for a living kin is expressed as the dead's desire to be part of the living kin's life or a desire to have ongoing contact with living kin.

ARRANGEMENTS

The predominantly Christian Ifugaos are now as inclined to believe in the Christian idea of a heaven, a more ideal place with no suffering and grievances as what is experienced on earth. Such attitudes towards death are apparent in funerary prayers often recited at wakes, sentiments expressed in eulogies and household conversations with my own host-family. However, what remains is that the dead are said to be reunited with ancestors in the afterlife. Despite conducting funerals with Christian services (predominantly Catholic in Kiangnan), one's peaceful transition to the after-life, to join one's kin, is marked more prominently via Ifugao funerary of-

ferings similar to the one previously carried out for ancestors – ‘no more, no less’ as explained to me by my friend, Marlon. This expression refers to the quality of the funeral.

In the next section of this chapter, I will further detail the sacrificial offerings made in funerals especially in relation to prestige and solidarity. This section however, provides an overview of differing funerary arrangements according to the identity of the deceased, or the manner in which they died. For example, a person of elite status should not have a funeral which is below the minimum of what is required for someone with status, in the same way that a commoner is not obligated to undertake a *kadangyan* (wealthy class) funeral. Though challenges arise when the heir of a *kadangyan* couple, do not have the financial means to carry out a funeral for their high-status parents.

In the case of a premature or unnatural death, funerary rituals are carried out differently. For children regardless of status or gender, the wake only last three days, and a pig is sacrificed to entrust the care of the child to the ancestors, who will be the child’s guardians in the afterlife. The premature deaths of children and adults, take a much different tone than those of funeral for elders. During my time in Kiangnan, there was the great misfortune of a teenager dying, from what I understood to be extreme dehydration. Normally, auntie Doring is very keen on having me accompany her to funerals and very readily invites me to join her. However, in the case of the aforementioned death, her attitude was more sombre. Actually, the entire house was quite shocked, since auntie Doring’s grandchildren knew the young lady. Regarding the funeral of the young lady, there were no large public gatherings for her wake. Intimate prayer services led by members of the Catholic Women’s League were held throughout the week for the tragic event. It is through my host-mom’s regular attendance of such prayer gatherings that I came to know how funeral services for the young lady were progressing.

While visiting me in Ifugao, a friend from California and I attended the funeral of a teacher who unexpectedly passed away in her 50s. Making the circumstance all the more tragic is how the death happened on New Year’s Eve. In fact, it was a rather fraught New Year’s Eve with three unfortunate deaths occurring in Kiangnan.

At the time, Auntie Doring went to Baguio with her two grandchildren to visit her two sons. Apo Talin, one of Auntie Doring's grandson and her nephew remained in Kiangnan. It is Auntie Doring's grandson who informed me that one of his former teachers had died.³ The day after the New Year, with my friend Linda in tow, we attended a wake for the departed teacher. As Apo Talin could not attend, it was the only time I attended a funeral without a community member accompanying me.

My friend and I happened to arrive at the house with other community members, and were greeted by the husband of the teacher, who led us in the living room, where the departed wearing a white dress laid in an open-casket placed in front of the room. Towards the back of the room, there was a table with family photo albums arranged. A community member assured me that we could peruse them freely, and asked me to pass one to her. During the wake, religious hymns were sung, and following that, *binakle* (sticky rice desserts wrapped in banana leaves) were passed around. There was a noticeably hush tone in the way attendees spoke. Similarly, the teacher's husband was still making arrangements, often leaving the room to give directions to people.

While the corpse in this case has been embalmed and made to look serene, with the departed wearing a white dress, in previous practices, the corpse would be washed simply with water. As described by an early account by Barton (1946) the orifices of the corpse would be blocked by cotton, to prevent the fluids from oozing out, dressed in a *wanoh* (g-string) for men and *tapis* (skirt) for women. Kadangyan would bear the insignia of being a *kadangyan*, the hornbill headpiece for men and the *indungdung*, a brass figure, attached to a beaded string which is then placed around the head of the woman. The corpse would be left outside to decompose on a funeral chair, and in previous times, the Ifugao had corpse-takers whose job it was to fan the corpse. As a friend recounted to me, he recalled being a child in the 80s and smelling decaying corpses, before the practice of embalming took hold in the province. In the last section, I further discuss the implication in the practice of embalming corpses.

³ In detailing funerals, I chose not to disclose the names of the deceased

How Christianity figures in funerals also depends on the stage of the funerary rite. In wakes outside of the key stages of the funeral such as, the *bohwat*, *katlu* and burial, kin sponsoring the funeral seem to carve out more space for the inclusion of prayer services. However, it is in the key stages of the funeral, when Ifugao observe the funerary arrangement carried out by ancestors, and when sacrificial offerings are made. In the funeral of a Nagacadan elder, I arrived just as such offerings were being butchered. The invocations of the deities and ancestral spirits are performed by the *mumbaki* before the *dangli* (sacrificial offerings). This includes the invocations of the ancestors and deities. There is in fact segregation when it comes to the carrying out of wakes and ritual sacrifices. Ritual sacrifices are carried out before the prayer services.

As I noted earlier, my experience of funerals was defined by the enactment of Catholic masses, with the distinct presence of Ifugao practices via the sight of men singing the hair of the dead pigs prior to butchering it, men drinking *baya* and playing cards and the *hamul* queue that always follows the prayer service (Photo 2.1). During this funeral I, along with two companions, manang Marilyn, an iKiangnan and Jovel, an iHungduan, also sat idly outside amongst a crowd of people. The casket of the elder was inside the house with a few people keeping vigil. As Jovel needed to interview a Nagacadan council member he took the time to do so at the funeral. Actually, since almost everybody attends funerals, people use it as a time to catch up with someone they have been meaning to speak with, usually about affairs regarding work, particularly amongst civil workers. Community members often fit funerals in their schedules, though, there is no set program and people join the services at whatever time they could. However, the crowd grows even bigger as it gets closer to the start of the *hamul*. When a heritage mapping forum was being conducted in Kiangnan, the Nagacadan council members were noticeably absent from the forum, and once the Mayor's assistant received a text, she informed attendees of the forum that there is a funeral at Nagacadan and preparations are being made for the wake (a different one than the one I describe here).



Photo 2.1: Funeral attendees queuing for the *hamul*

After about half an hour waiting outside, we saw members of the Kiangnan Senior Citizen Association walking towards the house, some of them were wearing *chalecos* (vest) bearing the insignia of the Catholic Women's League or the Kiangnan Senior Citizen Association. As they walked towards the house, we were told that the 'program' (prayer service) would begin soon, so Marilyn and I went inside the house, while Jovel remained outside to speak with the council member. I must note that there tends to be a gender and age divide when it comes how people arrange themselves at funerals. Most of the young men stay outside, drinking and playing cards, while women, with children and some male elders carry out the prayer service inside the house or another designated area around the house plot.

During the service, various elders of the community stood by the contemporary wooden, varnished closed-casket and recited eulogies. Following the eulogy was an abbreviated requiem mass, and the singing of hymns. At the time, there was a power outage and since many people were crammed into the room, many of the attendees were fanning themselves, making do without an electric fan. After the prayer service, a *hamul* was served to the public which consisted of boiled pork, unseasoned and not mixed with vegetables, as this is the pig has been sanctified to join the dead in the afterlife. In particular, large funerals, or any familial milestone, food vendors loiter around the area of the house, selling ice cream and snacks, but this is not judged critically by the community members, and in fact even the sponsoring

family will sometimes buy a *buko* (coconut) juice or ice cream from one of these vendors.

The funerals I have presented demonstrate the flexibility of funerals, whereby how and when Christian practices are featured alongside Ifugao funerary practices depends on the household. While the *hamul* extends the sharing of meal in the widest scope, through its open-for all nature, prayer services allow for the participation of more devout Christians. In this way, funerals, particularly those of elders, stimulate community members to share in both the commemoration of ancestors and the consumption of meals in the case of Ifugao wakes.

In McKay's study of Ifugao migrants from Asipulo, she notes people's syncretic practice of merging Catholicism with Ayangan paganism (2012: 27). McKay however, points out that while one congregation may be open to syncretic practices, Pentecostals and Iglesia ni Cristo followers more actively reject Ifugao practices than Catholics (27-8). As McKay points out, despite such parish restrictions members of Iglesia ni Cristo still feel compelled to carry out funerary ritual obligations, since such practices allow for the "widest possible spiritual and material networks of support" (2010: 339). I add that in this case, spiritual support does not simply mean the widening of one's religious community (i.e. access to both prayers and rituals), but also in the fact that it is not only the living that may be recruited for assistance, but likewise the deceased. However, despite this inclusivity, funerals create differentiations in how the dead are treated in regards to the manner of their death and their status. Additionally, as I discuss later in the chapter, funerals likewise have the potential to cause tensions amongst kin and affine and financial challenges for descendants.

Previously, victims of murder (regardless of gender, or status) are given a funeral that is described by auntie Doring, as being sad, uncomfortable and chaotic. My host grandmother, *apo* Talin, recalled that in this type of funerary ritual, called the *him'ung*, people would scream and taunt the corpse and periodically grab on the corpse's limbs. As my friend Marlon added, the corpse is dragged across rice fields. The corpse of the murdered is usually not cared for. The treatment of the corpse is meant to incite anger so that the spirit of the departed will avenge their own death,

by causing sickness or death to the murderer or the murderer's kin. Similarly, animals are sacrificed to the deceiver god *Manahaut* to deceive the murderer and his kin, to cause them harm, instead of causing further disruption in the lives of the victim's kin. The souls of the murdered are often said to be wandering around, and have difficult transitions into their afterlife, they are immobilised, unable to be fully transported to where their souls should be, which is with their ancestors.

Regarding victims of headhunting, in Beyer and Barton's early ethnography of Ifugao funerals, they note that:

...the souls of men buried by this ceremony lead most unhappy lives. They are forced to wander, for some time amongst the war gods and the great evil deities of the Sky World...it is far from having an honor to have one's head taken. In fact, to the Ifugao, it is the greatest of all misfortunes (1911: 243).

The *him'ung* is no longer widely practiced as it once was with the corpse being treated in the manner described. In fact, my host mom who is now in her 70s and her contemporaries who I asked have never witnessed the carrying out of a *him'ung* in the same fashion as the previous treatment of the corpse. This demonstrates the dormancy of the practice. Though, Maria Stanyukovich, an anthropologist studying *hudhud* in Ifugao, has mentioned her observation of such a funeral, in which she recalls the funeral of a man murdered by a machine gun (2000: 402). Though to clarify, while corpses may no longer be treated as such, this does not preclude the carrying out of sacrificial offerings and performing of rituals to *Manahaut*.

However, I must note that prayers affect in a different manner than Ifugao rituals. As we see in the funerals of the murdered, while prayers may provide kin with comfort for the salvation of their loved one, it is actually the *him'ung* ritual that makes it possible for living kin not to be plagued by the unrest of their murdered kin. Unlike rituals, prayers are not as potent and effective in sustaining the genealogical ties between relatives, or the reciprocal act of kin taking care of each other even after death. The maintenance of genealogical ties, via the caring of each other in life and death, is more served by Ifugao funerary rituals, particularly since it is the ancestors that can intercede for the requests of the living. Inversely, it is also the an-

cestors' claims on their kin that can cause illness in the living.

Actually, even in the Catholic practice of *novenas*, genealogy plays a significant role. The mention of deceased immediate kin is integrated in the recitation of prayers. In times of illness and death, members of the Catholic Women's League of Kiangnan, for which my host mom is an active member, organise a *novena*. During my residence in Kiangnan, after having concluded that I was suffering from a spell incurred from Hungduan, a *novena* for 18 nights was held for me at auntie Doring's house. In this way, while I do not have recourse to particular Ifugao well-being rituals, prayers were well within my reach.

The carrying out of *novenas* was a regular occurrence in Kiangnan, and some Catholic households often participate in a block Rosary Month (in May and October), whereby neighbours say the rosary in a different home each night, for each of the households on their block (neighbourhood). This prayer group are akin to a work group, where community members, often women, reciprocate prayers for each other's living or dead kin. Usually the regular members of this prayer group tend to be women, and are led by the Catholic Women's League. The group of women gather at the sponsor's living room and recite prayers in accordance with the rosary beads. After the prayer service, coffees and pastries are served. Some households may serve *pansit* (a noodle dish) or macaroni salad. On the last night of the novena, a large dinner is served which sometimes consists of spaghetti, maybe a chicken or pork dish and a desert. Though, unlike the *hamul*, such gatherings do not have the same scope in its inclusivity, and is in fact rather intimate. The prayer group, along with neighbours and family members in attendance of the prayers, are the ones who take part in the dinner, as opposed to the *hamul* wherein all community members and even passers-by are invited to partake in meal (Photo 2.2).



Photo 2.2: Dinner served for a *novena*

In a later section, I return to a discussion of my illnesses in relation to Ifugao kinship relations and the undertaking of the *bogwah*, an Ifugao's second funeral. What I want to note here is that in the *novena* held for me, I was asked to include my own deceased kin. My deceased kin was thus mentioned and recruited for the efforts undertaken to address my health. Auntie Doring likewise saved some food that was served at the dinner, and set it aside as offerings for the deceased. Setting aside food for the deceased is a common practice in Philippines, though this is done on events specifically for the sake of the departed (i.e. death anniversary, birthday of the deceased kin or on All Saints Day), but not necessarily events sponsored for the living. Aside from the *novena*, prayers are also deployed to commemorate ancestors on All Saints Day, when prayer groups take turn praying over the tomb of their neighbour's dead kin. In this way, ancestors are included in their descendant's spiritual transformation and neighbours continue to share in the work of commemorating ancestors.

The adaption of prayers likewise allow for extended care between familial ties that are not by blood. For instance, prayers are useful in the case of adopted children, or when a spouse is not Ifugao, and therefore do not have access to particular Ifugao well-being rituals that necessitate Ifugao kin, prayers take on a significance. Yet, for Ifugaos, as I note in the next sections, additional, alternative means to

well-being is realised through blood-ties, since they have access to rituals that affect only kin of blood-ties. However, such ties are not taken for granted. In the next section, I discuss how these ties are constantly maintained in the work undertaken for dead kin, which requires an exchange of assistance in funerals for distributed meat.

OFFERINGS

Central to funerary rituals are the animal sacrifices or *dangli* as they are referred to, which are the offerings for the deceased. The well-being of the descendants is doubly linked to the dead, in this case, the individual being buried, and the sacrificial offerings required in the funeral. Funerary sacrifices are most often pigs and sometimes *carabao* (buffalo).⁴ For the commoners, one pig per day of the wake is sufficient, for the *kadangyans*, two or three are butchered. The *kadangyan* must also butcher a buffalo on the *katlu*. Animals butchered for funerals are not just for deities but for the ancestral spirits so that they may care for the newly buried kin that are soon to come their way.

Pigs (and buffalos) are offered to ancestors to ensure that the newly dead remain in place wherever they are, and not return to the earthly world, unless called upon by the descendants for some other reasons other than sickness. As Barton notes in his analysis of Ifugao funeral rituals, descendants would obviously rather perform prestige rites or celebratory feasts than rites for curing sickness (1946: 177). Thus, animals are sacrificed to convince ancestral spirits to spend their efforts bestowing prosperity for the descendants, instead of causing sickness, and then having to be called upon to cure the very sickness they caused (ibid). Such animals are also seen as necessary in how the dead are transported to the afterlife, as pigs are considered *ulap* (guide) to the afterlife. As my host-mom once remarked, a buffalo is the dead's ride to their ultimate destination.

In the case of Ifugao funerals, pigs play a central role in well-being rites (i.e. engagement, marriage and death), along with other rituals such as an *ibbuy*, the sale

⁴ The general term for water buffalo in many regions of Philippines is *carabao*; people use this term for water buffalo in Tagalog, Ilocano and Tawali. However, it has to be noted that even when speaking English, people more naturally refer to buffalos as *carabao*, and not buffalo.

and transfer of property, whereby access and claim to land is realised through the sacrifice of a pig. When a pig or buffalo is butchered, the Ifugao conduct a systematic procedure of distributing the meat to the relatives of the deceased. This practice of meat sharing is called *bolwa*, whereby the hind legs of the pig is reserved for the immediate family, and the remaining portion of the pig is allocated to extended family in degree of genealogical ties to the deceased. The meat is also given to the *mumbaki* (the priest who perform the ritual invocations) and members of the community who assisted in the butchering of the animal. The butchering of the pigs is a special skill, since it must be done in a precise way. Throughout the duration of the funerary rite, the *mumbaki* having consecrated the pigs may not partake in the meat from the sacrificial pig. Likewise, the dead's kindred may not partake in the meat since, the sacrificed animal's souls are the ones accompanying the dead kin's soul.

Such animals are also constituted in kinship, since the uncooked meat is distributed to kin, depending on their relation to the deceased and their contribution to the funeral. The cooked meat on the other hand is served at the *hamul*⁵ and distributed to all the community members who attend the funeral, thus signalling to the community that the proper sacrifices have been carried out. This is of particular importance to the *kadangyan*, since by feeding a great deal of the community members with the butchered pigs (and buffalo), along with rice, they are demonstrating that they are properly giving their deceased the appropriate funeral. The portion of rice in relation to the proportion of meat sacrificed also demonstrate rice as a prestige crop, since the more rice needed for the *hamul*, usually means the more rice fields the sponsor owns or the more rice they can afford.

In the previous chapter, I noted the role of mobility in kinship ties, highlighting that despite distances between kin, people are not forgotten from one's genealogy. Particularly, I considered the role of rice and meat distribution in kinship ties amidst dispersal of kin across spaces. However, such ties are not automatic, and paths are in fact strengthened or destroyed, through the exchange that transpires

⁵During my stay in Kiangnan, a *kadangyan* funeral or *bogwah* would be particularly exciting in our household, especially if my host-mom is related to the sponsors of the *bogwah*, since this would mean being able to eat cara-steak for a meal.

between funerary ritual expenses and meat distribution. As my interlocutors note, conflict can arise when the obligated kin do not share in funerary expense or make an effort to attend and yet, still expect their share of the meat. Likewise, when the distributed meat is not appropriate to the expenses shared in a funeral, this is a cause of tension. Inappropriate portion of meats distributed may even be done purposely as an insult or judgement signalling dissatisfaction with a fellow kin's contribution. Thus, the very practice which strengthens ties despite distances can likewise be the cause of tensions. Actually, in failing to participate in the exchange of labour and for rice and meat, one weakens their kin relations and the network of support these ties come with.

For funerals, the pigs are sacrificed for each day of the wake, especially: the first day of wake the *bohwat*, *katlu* (third day), *kalima* (fifth day) and so on. The body of the *nawotwot* (peasants) should be buried on the third day, for the *tagu* (commoners) on the fifth day, and for the *kadangyan* (wealthy) on the seventh – thirteenth day (Barton, 1946: 178). Presently, a wake for a *kadangyan* usually lasts seven to nine days. Expenses for the funeral of elders are often burdened by their children, with the child who inherited the most, bearing the biggest expense. For deceased elders with no children, his or her closest living kin must manage funerary expenses. Should the deceased be a young married Ifugao, then his funeral is financed by his spouse, or by his own family, in the case of a young, unmarried Ifugao. The in-laws of the deceased must also contribute to expenses and provide: the *hablag* (textiles, such as funerary blankets), rice wine and food items. The in-laws in turn, are given a portion of the meat butchered from the funerary sacrificial offerings.

The differing funerals in relation to social status require unequal investments, with a *kadangyan* funeral necessitating the most expenses. The more spent on a funeral, the more attendants can be accommodated. In this way, a family maintains their prestige through their ability to provide for attendants for a longer wake. Likewise, a wake allows for kin to pay tribute to their loved one, to extend the care given to them while alive, even after they have died. Ifugaos attempt to meet even the minimum requirement for a loved one's wake as not to be perceived as uncaring

for their dead kin. The smallest of funerals require a great expense, and as much as possible, Ifugaos meet this expense, even if it means having to sell property or accrue debt from extended kin. Though, I must note that community members are just as likely to donate to funerary costs in cases of hardship. Not being able to afford such rituals is doubly unfortunate, since it not only denied a particular tribute, but likewise, as I will further discuss, it brings about a challenge to the comfort of both the dead and living.

Since status is ritualised, a *kadangyan* couple, regardless of their current financial situation, do not lose their title as *kadangyan*. *Kadangyan*, generally mean wealthy, with the minimum requirement of having performed the *uyauy*, a prestige rite. As a result, in funerary rituals, *kadangyan* descendants must carry out the appropriate funeral, no matter the expense. It may be easy to conclude that the distinct way *kadangyan* conduct funerary rituals are to attain prestige within the community. Certainly, such an attitude towards mortuary rituals is potent in Southeast Asia. In Volkman's study of the Toraja funerals, he insightfully points out the way in which former slaves, who have vastly improved their wealth and class, can also improve their status by elevating the status of their dead through grand funerals. In discussing the impact of migration on the proliferation of these status-making funerals, Volkman notes:

For low-status migrants...it is a familiar game to be played in new ways, a stepping-stone toward previously undreamed-of rank; for high-status migrants it frequently has become a wildly inflated competition (1985: 161).

The carrying out of funerals in Kiangnan is seen in a different light. For Ifugaos, though status is implicated in the changing nature of funerals, this is not the primary issue. Instead, the concern is the reinforcement of links to ancestors via the undertaking of funerary rituals similar to the previous funerals carried out for ancestors and depending on the status of the departed.

Once a couple successfully conducts a *hagabi* ritual and attain elite status, their funeral must be of a certain standard. However, individuals do not *become* more prestigious through the carrying out of grand funerary rituals. Instead, grand

funerals are carried out in a certain way, because the individual *is already* prestigious by gaining prestige through ritual or more presently, through political or professional status gained, despite not having performed prestige rituals (i.e. being a doctor, lawyer, politician etc.). In this case, already achieved status is affirmed and maintained through funerary rituals, but funerary rituals do not elevate one's status. A friend once opined that if you have the money, even if that money was gained by winning a 'jackpot', there is nothing stopping you from paying for a grand funeral. In such a case, wealth does not necessarily signal an 'elite' status, it simply means being rich and having money. Though, the fact that status is ritualised actually becomes rather problematic for *kadangyan* families whose wealth has changed, and yet are still obligated to carry out funerals in the *kadangyan* manner. This is particularly difficult for the descendants, since the heirs⁶ of the deceased bear the expense of the funeral.

Inversely, those who have never performed the necessary prestige ritual, no matter their financial status, are not obligated to carry out funerary rituals required in a *kadangyan* funeral. Actually, it would be considered inappropriate for a non-*kadangyan* to suddenly make their funerals with all the markings of a *kadangyan* funeral (i.e. *kadangyan* funeral regalia or butchering of a buffalo). They may assert their economic status by performing grand weddings, engagements, birthdays or any other occasions that involves a *hamul*. For older generations of Ifugao, funerary rituals should not be used as a platform to articulate aspirations for improved status nor should they be used as the display of material wealth. Such guidelines for appropriateness does not preclude Ifugaos from performing elaborate funerals, despite not having had achieved prestige through ritual channels. Actually, funerals have less to do with status-making, and more to do with one's capacity to assert their membership amongst their ancestors. Changing notions of status are indeed implicated in this process, but this is not an issue about status per se, but on how descendants can uphold a connection with their ancestors amidst changing wealth

⁶ In the past, when primogeniture rules were followed, the eldest child acquires the biggest portion of ancestral lands, thus they contribute the most in funerary rituals. Presently, Ifugao parents have begun to divide property more equally between their children, so the expenses in funerary rituals are becoming more equally divided.

and prestige.

In Kiangnan, one of my neighbours was an Ifugao elder in her late 80s. Honorary, or *apo* Ata, as I called her. During one fraught week, *apo* Ata was hospitalised. Apo Ata's daughter, Doreen, was the one principally engaged in all of *apo*'s hospital visits and follow-ups, as *apo* lives with her daughter. While on a morning walk with *manang* Doreen, who is also my neighbour, she spoke to me about *apo*'s declining health, and how this was compelling the family to have a talk about funeral preparations. Apo Ata had expressed that she did not want them to go through so much trouble in offering the funeral, so she requested for a simple funeral. I asked *manang* Doreen what she intended to do when the time comes, for which her reply was, "I told mother that we will carry out our duty and give her a funeral that she deserves." I asked if this made *apo* mad, since her request of a simple funeral will not be fulfilled, to which *manang* Doreen replied, "No, because she knows that when she dies, we will give her the proper funeral, and anyway she won't see that it wasn't the simple one she wants." This exchange reveals how proper funerals are experienced by the dead, and how I mistakenly perceived the relationship between the actions of the living and the discomfort of the dead. The dead do not cause sickness to the living as a result of their spirit *seeing* that their funeral was not what they want. Actually, the deceased *do not just see* an improper ritual; instead, they *experience* it in their afterlife.

Funerary rituals are carried out because it provides the living the capacity for the best of possibilities, in this case, peaceful transition for their dead, and well-being for the living descendants. Those who are less likely to afford such offerings then, are more likely to be nagged by discomfort. As my friend Marlon explains it, one's adherence to the status-distinct funerary rituals is what entitles the deceased to join their ancestors. Though, status in this case is more about membership to a family. One must be given a similar funerary ritual to their previously buried kin, as a friend expressed, "be garbed in similar funerary attire and accessories, so that their ancestors may recognise them in the afterlife." An improper funeral could result in the newly-dead being rejected by or alienated from their ancestors in the afterlife. The deceased who are not accorded the proper ritual are said to not rest in

peace since they are not where they belong, which is with the rest of their family. As a result, the buried kin may communicate to the living that the overdue proper funeral must be conducted. This prompting is often manifested in members of the immediate descendants becoming physically ill or emotionally unsettled.

Hence, despite changes in one's financial status, people of the older generations are not inclined to set a precedent and break away from the funerary patterns of their family, and in fact are rather critical of this transgression. Though, for the present generations, as my friend Marlon notes, a lot of the *kadangyan* are no longer able to fulfil their funerary obligations. Inversely, the new generations of Ifugao are redefining what is acceptable for the *nouveau riche* with non-ritualised status. Funerals are now conducted in greater magnitude and expense, in accordance with increasing financial resources, regardless of whether or not a family has gained the *kadangyan* status through prestige rites like the *hagabi* ritual. Amendments to funeral rituals are undertaken by ensuing generations, in ways that relate to the carrying out of the *bogwah* (secondary funeral). As I later further discuss, alterations to funeral rituals encapsulate Ifugao's efforts in changing attitudes towards status and enduring sentiments regarding familial obligations, in ways that implicate one's health and financial situation.

Marlon recounted his own family's preparation for a funeral in which he states:

My maternal grandma came by to check on the death blankets they sell in the city market. She spent an entire day checking on all the details of the textiles to make sure that she got the right ones. All design symbols were individually checked, thread count, colour, positioning of the symbols etc. She said that a single mistake will bring misfortune to those who will survive her. If that happens, surely someone in the family will get sick, so they would have to perform a premature *bogwah*.

It is this saliency of the ties between the dead and living that is essential to the efficacy of funerary rites in Ifugao. There are a great deal of uncertainties that one can encounter in life and death. Uncertainty in this case is not necessarily an undesired situation; instead, uncertainty is a host of possibilities that could arise. Understand-

ably, from this host of possibilities, there are circumstances more preferable than others.

In their differing form as living livestock, butchered meat, cooked meat and sacrificial offerings, pigs undergo transformations, engendering and entangled in particular relations. As livestock, pigs (and buffalos) are investments and economic benefits, involved in a family's livelihood activities. As distributed, raw meat, pigs (and buffalos) establish and maintain kinship ties; as cooked, served meat in *hamul*, they accomplish the same, while also supporting the status of the sponsoring families within the Ifugao community. As ritual offerings, pigs (and buffalos) maintain kinship ties, affirm status, and enable mutual care between ancestors and descendants. They in effect, become more than just meat or animals, but play an active role in mediating the mutual requests for care that dead and living kin ask from each other.

Funerals can vary depending on individuals' age, status and cause of death (Dumia, 1979: 20). In regards to status, the sacrifice of buffalos for the *kadangyan* reflects an idealisation of well-being projected onto the animal being sacrificed. The buffalo is distinct from the pig, in that acquiring and sustaining a buffalo requires more resources. Though a pig is cared for and sheltered, it does not inspire the reverence and value of a buffalo, nor does it enjoy the freedom and leisure the buffalo may enjoy. The well-being of people *with* status, in comparison to those without, requires more resources, more sacrifices in *hongga* rituals to achieve what is needed to ensure their well-being. All the work and resources contributed to the sustenance of the buffalo culminates in its death for a *kadangyan* funeral, further giving it prestige. The buffalo's death encapsulates the cumulative ancestral and present resources and effort that went into the status or well-being attained by the person being buried. To be buried as a *kadangyan* usually implies that the ancestors were industrious in acquiring agricultural fields (particularly rice fields). In the death of the appropriate animals in funerary rites, the desired outcome is that the idealisation of well-being which the animals encompass will be actualised by the descendants.

Yet, the sacrifice of particular animals is not simply for prestige; it likewise embodies how resources are made available. The death of the necessary animal al-

lows for people to assert their membership in a family, but not simply by way of status. Ancestors recognise you in the afterlife insofar that you have carried out the same ritual and the same investments and labour. In doing so, one contributes to the longstanding work that has been carried out for the sake of the family's well-being. In this way, the resources that were made available to the living through the work of ancestors are made available to the dead, for their own well-being. Thus, these particular animals are members of the collective involved in the maintenance of kinship ties.

REARRANGEMENTS

The first *bogwah* I attended was for a distant relative of auntie Doring. A member of the family consistently had dreams plagued by the presence of her father. It is for this reason, that family members immediately realised that it is the father's grave that must be exhumed. However, the dead do not always explicitly reveal themselves to the living. In some cases, the restlessness of the dead translates into nagging maladies: headaches, stomach aches, a rash, etc. One must investigate which deceased relative is in need of attention. Similarly, one cannot fully be certain that such maladies are in fact caused by relatives. In such a case, Ifugaos turn to divinatory practices, by visiting a *munagba* (medium) that can best identify the cause. In some cases, this may not actually be caused by the dead, but instead be the work of *pinadings*. I must emphasize that Ifugaos do not automatically turn to rituals at the hint of a malady.

To attend the *bogwah*, auntie Doring and I walked to the funeral at night, and we had to carry flashlights with us, as there were no street lamps lining the road from Poblacion to Nagacadan. When we arrived, outside there were some people sitting on plastic chairs. Under a free-standing awning, there was a crowd of men gathered around a table. The men were in the midst of drinking *baya* and gin, and gambling with a card game. When we passed by the men, they greeted us and began to resume their game. The various Christian parishes have in fact discouraged this practice, with some denouncing it. Criticisms over this from the church have long

persisted. Though this has caused a debate amongst community members. As some have posited, the act of gambling is to alleviate the sorrow of the sponsoring family, but likewise, at times, the card game is rigged to favour a win for the kindred of the departed.

We then entered the home and in the living rooms were more plastic chairs arranged around the furniture. In front of the room was a table, with what seemed like a parcel on top. However, this was in fact the wrapped, exhumed and cleaned bones of the sponsor's father. The bones were wrapped in a death blanket. In Kiangán the death blankets are red textiles with black stripes and white patterns on the stripes. As we sat, a bottle of *baya* and red wine was being passed around. Hymn books and a mass programme were then distributed. In fact, amongst the songs sung was 'Oh Danny Boy', which quite surprised me, since in the United States, the song is usually sung drunkenly at a St. Patrick's Day Celebration. When I asked the women about the song, they related to me that it is a usual song sung in funerals.

In the descendant's obligation to their ancestor, a second funeral, the *bogwah*, is carried out to commemorate the death anniversary of the departed. The *bogwah* is part of the Ifugao's life and death cycle. While the initial funerary arrangements conducted upon one's death is considered to still be part of an Ifugao's life cycle, the *bogwah* finalises one's death and is significant to one's transition into becoming an ancestor. The period between the first funeral and the carrying out of the *bogwah* is the most precarious time for the descendants. Ancestors, not yet settled in their afterlife, have claims on their descendants' souls and as such. During this in-between period, out of affection or request for the descendant, a recently-buried ancestor can call on the soul of the living, causing them illness.

Just as with the initial funerals, the *bogwah* involves planning and consultation. As *manang* Doreen tells of *apo's* desire to *mabogwah* her parents, the process was carefully planned out, and the necessary family members were informed of this decision. The reason for the *bogwah* is that *apo* wanted to relocate her parents from their forest tomb in Pindongan to their family tomb in the community cemetery, and had to perform the *bogwah* to alert the ancestors of the move. Similarly, the responsibility of the sacrificial offerings had to be properly discussed among the heirs. For

example, who will provide the pig on the first, second or third day. The *bogwah* is done overnight or a maximum of three days. As with the funerals, one must observe what is required for their status; if a buffalo was killed in the *katlu* of the deceased, then on the third day of the *bogwah* a *buffalo* must also be killed. The body is reburied on the last day observed.

In a *bogwah* the exhumation of the bones is a more intimate affair, wherein the grave is exhumed and the bones are cleaned primarily in the presence of the sponsoring family members. The *bogwah* is referred to as grave cleaning, whereby the dead is exhumed and both the corpse and grave are cleaned. Often, when the bone has been exhumed, they have gathered water and moisture, and the bones are cleaned as the water and dew is wiped off the bone. The process is idiomatically referred to as 'bone cleansing' or 'bone washing', although bones must be left dry. In this case, water is an intrusion that must be rid of, along with other natural elements that has latched onto the bones (i.e. leaves, dust, ants). These elements are how the dead signal their discomfort in their afterlife. In fact, after they are cleaned, the bones are wrapped in the funerary blankets.

Water (and other natural elements) is expressed as a signal of neglect, a reason for ancestors to keep calling on descendants, which is why people ensure that bones are dry and clean before wrapping them, because not doing so would be purposely ignoring the maintenance and care that must be given to ancestors. However, water is also important in how people think about reproduction, in relation to the cultivation of rice and human reproduction. The ritual for a difficult birth in fact, calls on deities related to rivers. Water, thus is considered both a life-giving force and one that can cause destruction and harm. In popular myths, such as the origin of the Ambuwayya Lake, or the formation of Ifugao's mountainous topography, uncontrollable water is seen as causing death and destruction. Also, food taboos during funerary and agricultural rituals are related to water such as, seafood and shellfish or vegetables that wither and shrink when cooked in water (because this is the opposite of growth). Actually, what is so distinct about the materiality of rice is that water is so necessary to its growth, not just in the maturity of the grain, but in how the way rice expands upon being cooked in water.

The mutable state of water, scale and cultural significance is important to point out, particularly in how water is perceived to be both fostering life and causing harm and destruction. In this case water is both an elemental part of bodies, and also bodies of water are both required for life in the same manner that it can cause harm or misfortune. Indeed, water takes on different forms, as moisture, liquid or solid (ice), it can vanish and likewise be absorbed (Orlove and Catton, 2010; Helmreich, 2011). In this way, water appears as “both potentiality of form and uncontainable flux” (Helmreich, 2011: 132). As Orlove and Catton, the quantity and quality of water is experienced as social constructions, and the mutable materiality of water and its cultural significance cannot be disentangled (ibid).

The *bogwah* ritual may be carried out at the one-year anniversary of the person’s first funeral, or ideally, two to three years after the person’s funeral, but no more than five years after. In the wrapping of the bones, this funeral simulates the initial funeral and burial, to solidify the dead’s transition into the ancestral world, the afterlife. Having been buried and taken care of by living kin, the spirit is signalled of its state as a spirit and convinced to return to his or her place in the afterlife, instead of afflicting living kin in the earthly realm. Generally, the grave is cleaned only after the flesh has decayed and only the bones remain. However, this second funeral is not the last time that the bones are cleaned and buried. In fact, the bones are periodically taken out and cleaned when the bones must be moved to another site, when a widow or widower remarries, or when an immediate Ifugao kin is plagued with sickness.

While I previously described past treatment of the corpse, which simply involved washing the corpse with water and allowing it to decompose, corpses are now more widely treated with chemicals such as formaldehyde, an embalming liquid. The use of chemical prevents the corpse from decomposing, especially as people have adapted the practice of open-casket viewing in wakes, and as people perish in hospitals. Likewise, laws that require embalming for human remains are inescapable, particularly when the remains of the deceased who have emigrated Ifugao, are returned to the province upon their death. There is in fact, a preference to have the body returned so that they may be buried with ancestors. Currently, the dead are

transported across the Cordillera, the country or from overseas. When I was in Kiangnan, a Congressman's father died in the United States and was flown back to Kiangnan. The duration of the body's decomposition was once a signal of wealth. Presently however, the practice of embalming, which tends to be how corpses are treated, now signals the expenses which have been undertaken for the physical travel of the dead across spatial boundaries.

Embalming is expressed as one of the reasons that the Ifugao's secondary funerary rituals are delayed, since the decomposition of the corpse is prolonged by the use of embalming treatments. However, in the case when it is absolutely necessary for the bones to be exhumed, but there is still flesh or hair on the bones, these are separated from the bones and never wrapped and buried with it. This is because to begin with, the dead should already have decomposed, with only the bone remaining, and because it is the cleaned and dried bones that confirm to the departed that their grave has been maintained and can peacefully leave the realm of the living and discontinue making requests from their kin.

One would expect that transformations in the treatment of corpses – such as the use of chemicals to treat the corpse, or the use of contemporary coffins bought from funeral parlours – would cause a decline in the carrying out of the *bogwah*. However, such advancements have actually given the *bogwah* more potency. As auntie Doring and others have mentioned to me with awe, even with today's water-tight sealed coffins, there are still intrusions. Likewise, the part of the remains that is being touched by the foreign substance in the coffin continues to correlate with the malady that a descendant is suffering from. Additionally with the practice of embalming, even those who have emigrated from Ifugao are able to be buried in Ifugao, and thus be given their secondary funeral or have their graves cleaned should the need arise.

As I described earlier, during my residence in Kiangnan, I spent a particularly frustrating month in which I was constantly plagued with illnesses, from skin allergies, stomach aches and a back injury. I recounted this to a friend, Manang Marilyn, and mentioned to her that Auntie Doring will be holding a *novena* for my health. Manang Marilyn expressed her regret of me not being Ifugao, since had I been Ifu-

gao, a *bogwah* could be an appropriate response to my current physical condition. According to her, by not being Ifugao, my genealogical ties do not operate in the same way that Ifugaos consider theirs. My non-Ifugao ancestors do not possess the capacity to cause me illness for which they may contribute to the solution. Inversely, Ifugao ancestors are said to only intercede for their descendants since ancestors are *kababain* (Ilocano for shy, embarrassed) to do so for non-kin.

In his essays on the Amerindian concepts of kinship, Viveiros de Castro notes that genealogical ties are, “irreversibly inscribed in the body” (2009: 255). To take this step further, for Ifugaos, such ties are not only inscribed in the body, but are essential to one’s physical well-being. Relatedness amongst ancestors and heir is so central to the *bogwah*, that the ritual can only be performed for heirs and siblings (related by blood). It is for this reason that one cannot *mabogwah* a non-Ifugao, even if the individual was adopted into an Ifugao family. For the direct descendants then, destruction in genealogical ties is in principle, self-destructive. If these genealogical ties are not properly maintained, the health of the descendants is threatened, since alternative paths to well-being are severed.

As some of my interlocutors have commented, the continued popularity of the *bogwah* – as a ritual performed for the ill – could be connected to people being unable to carry out certain funerary obligations. In contrast to those unable to meet funerary obligations due to lacking financial resources, there is also the purposeful breaking away from the familial pattern of their ancestors’ funeral. As one interlocutor has mentioned, if one can afford a big funeral for their loved one, it is natural that they would want to, no matter what sort of funeral has come previously. Further, people have noted that because *hagabi* rituals are now dormant, newly achieved professional or political status is accepted at face-value without the need for its authorisation by way of prestige rites. Such amendments in the observation of status in relation to funeral obligations reveal not only a shift in practices, but likewise, a transition in how people reckon their relationship with dead kin.

Illnesses requiring a premature *bogwah* are usually a signal of the ancestors trying to communicate their dissatisfaction with the living or an error or transgression in funerary rituals. Current amendments of practices are generational, arising

from instability as ensuing generations of Ifugaos work out how to articulate their funerary obligations in relation to religious conversions, fluctuating notions of class and status and greater mobility. However, this is not a recent transformation. As I have demonstrated in this chapter and in previous ones, social transformations have been ongoing, especially in relation to agricultural and religious activities. Though, as my friend insightfully remarked, as people grapple in engaging with external contexts, and how this should be carried out, ancestors are directly impacted by such changes or attempts of change, and thus, are indicating their discomfort of it.

The descendants, by carrying out the *bogwah* are comforting these ancestral dissatisfactions through the ritual, by showing that obligations will be met despite changes in how it is carried out. Though, just as ancestors are impacted by their descendants' autonomy, ancestors reciprocally impact the culturally specific ways that their descendants are reconfiguring and managing external contexts. In the syncretic practices of well-being rituals and the inclusion of genealogical ties in prayers, ancestors are doubly commemorated, while widening the living kin's spiritual networks. While shifting spiritual practices and articulations of class and wealth have been considered in the undertaking of Ifugao funerary rituals, as I will discuss in the next chapter, the performance of agricultural rituals have greatly diminished. However, transformations in the spiritual and economic activities of Ifugaos have compelled community members to reconceptualise their practice of rice-cultivation.

CHAPTER 3: CULTIVATING POSSIBILITIES

In 2001, when the Ifugao Rice Terraces was placed on the World Heritage in Danger list, among the key concerns for heritage management that UNESCO cites are: land-use conversions, abandonment of fields, neglect of irrigation systems, the introduction of pest species, out-migration and a declining interest in an agricultural practice (United Nations Educational, Scientific and Cultural Organization, 2001: 8). In re-evaluating these concerns, this chapter considers the changing Ifugao agricultural practices and the revival and reconfiguration of agricultural rituals and activities. I focus especially on the materiality of terraced, wet-rice cultivation, and outline matters regarding ownership, tenure and the labour and investments necessary in rice cultivation. Specifically, I feature the cultivation of the *tinawon* in relation to the introduction of high-yielding rice varieties. In Tuwali, *tinawon* translates to “once in a year”, as this indigenous rice variety can only be harvested once annually.

Equally significant to the cultivation of rice is the distribution of water for irrigation. Thus, this chapter explores the saliency of water in the irrigation of fields, the vagaries of weather, how water interacts with soil and the incorporation of aquatic species in the field. I also note that investments and labour does not only refer to agricultural techniques, but likewise consider the work for previously undertaken agricultural rituals and the work for its revival. To tackle these issues, I specifically draw from agricultural activities in Kiangnan (especially the villages of: Ambabag, Pindongan, Mungayang Nagacadan), and to a lesser degree, Hapao, Hungduan. I must note that my limited geographic focus is due to the fact that across Ifugao, and even within one municipality, there are variations in how rice cultivation is undertaken.

While this chapter touches upon agricultural practices that have transformed, I do not frame my discussion in relation to discourses on authenticity. Since my interest lies in grasping local notions and practices of sustainability, I instead focus on culturally specific ways that people adapt to environmental and social transformations. To elaborate upon the changing materiality of rice-cultivation, along with the labour and investment related to the practice, I adopt Sahlin’s sugges-

tion to approach tradition as the distinct manner in which people change and respond to circumstances. As Sahlin further argues, rejection of new practices is not necessarily anti-progress, but as a critical process of deciding what to maintain or change (Sahlins, 1992: 34-35).

In Ifugao, deliberations and adjustments are carried out in the process of making previous agricultural practices potent once more, albeit in a different manner than they previously were. This chapter explores the inclusion of agricultural activities in annual municipal festivals, the revitalisation of previously dormant agricultural rituals and the merging of agricultural activities in tourism. In previous times, the investments and labour devoted to agriculture is not simply a matter of the efforts exerted on the field, but also the work undertaken for rituals. Presently, agricultural activities also now involve work beyond the field. In this case, agricultural activities are integrated in tourist and community events that require press announcements, institutional organisation, tourism logistics and funding proposals.

The first section of this chapter outlines the cultivation of *tinawon* (year-long rice variety), and addresses land ownership and tenure and individuals' access to social and natural resources. *Tinawon* cultivation is then discussed in relation to 'Green Revolution' in the second section. These first two sections consider how cultivators are grappling with managing resources while responding to various uncertainties impacting their agricultural yields. The last sections of this chapter focus on the incorporation of agricultural tasks in tourism, the revitalisation of post-harvest rituals, and the way community members see these as opportunities.

Much has been written and commented about Ifugao rituals and the engineering of terraced, wet-rice fields. In this chapter, I primarily focus on the role such practices play in the present experience of my interlocutors and their reflection on past practices. I add these accounts to previous studies and descriptions. I am especially concerned with immediate or enduring uncertainties, in relation to the short and long-term management of social and natural resources. This is to address, but not resolve, essential dilemmas that sustainability presents, that is: What is to be sustained and whose responsibility is it?

In reflecting on these questions, I draw from Gammeltoft's reflection on the temporality of potential. In her study on sonographic imaging for pregnant women in Hanoi, Gammeltoft is interested in the relationship between past histories and future aspirations (2013). Gammeltoft examines the role of pregnancy care technologies in women's future aspirations and anxieties for their unborn children, in relation to a past entangled with the states wartime history (169-170). She argues that our understanding and perception of the past is shaped by our aspirations and expectations for the future. In this way, "the past emerges from the future" (Gammeltoft, 2013: 166). To address this issue of temporality, I focus on how people reflect on their past as they visualise a particular future. My own experience of agricultural activities was part of my own participation in one such visualisation: the carrying out of Rice Cycle Tours by a local NGO. Participation in these tours allowed me to experience how agricultural practices are being refashioned. Participating in activities within a heritage site also revealed to me the discrepancies in agricultural matters as they relate to the zoning of heritage clusters.

LAND AND LABOUR

Ifugao rice cultivation practice is narrated in the *huuwan' di nabugbugan di page* (origin of rice myth). According to the myth, after chasing a pig to the Skyworld (habitat of the gods), Kabigat and Balituk, wealthy brothers from Kiyangan¹, detect that the gods consume raw meat, since the gods do not possess the knowledge to build a fire. After teaching the gods how to build a fire, the brothers ask for the *ipugo*, a specific *tinawon* rice variety being consumed in the Skyworld. It is this *ipugo* rice variety that is considered sacred and requiring ritual. The cultivation of *tinawon* is a significant aspect in the criteria exercised by conservation agencies to evaluate whether rice terraces should be classified as heritage clusters.

The myth outlines Dinipaan's instructions to the brothers on: what proper tools to utilise; how to construct terrace walls and create irrigation systems; along

¹ Kiyangan refers to the municipality, while Kiyangan is an ancient Ifugao village which is located near the Ibulao River, presently Mungayang.

with how to organise labour, and perform rites which includes the sacrificial offerings (Scott, 1975; Dulawan, 2005).² The myth demonstrates the cooperation and negotiations that occur between people and deities, deceased ancestors and spirits that I have discussed previously. The myth explains the “reasons and rationale for the institution of the different agriculture rites” (Dulawan, 2005: 193, italics my own). Agricultural practices are done in a certain way not simply because it is ecologically sound but also, to serve the deities, in order to pacify the forces that may impact crops.

Conklin’s extensive documentation of Ifugao’s agricultural system highlights land classification and zoning as essential to the function of the Ifugao’s agricultural practice, which he expressed as both a topographical and material arrangement (Conklin, 1980). Forests on the peaks of the mountains serve as a watershed region, where human activity is limited. These areas are key water sources. As trees absorb water, they also prevent soil instability that lead to erosion and landslides. Below these peaks are the *muyong*, private forests managed by a household or a kin group. These areas are maintained through the planting of fruit and timber trees and further protect lower agricultural fields from landslides. The *muyong* protect communal forests located on the peaks of the forest while likewise allowing for groundwater recharge (Guimbatan and Baguilat, 2006: 61).

Below the *muyong* are agricultural fields necessary for food production, such as the *kaingin* (swidden fields) where *camotes* (sweet potato) and vegetables are planted. Hamlets are located below swidden fields and are surrounded by non-irrigated fields where legumes and other vegetables may be planted. Along the lower levels of the hill are the valued *payo*, (privately-owned irrigated rice-fields) which follow the contours of the mountain’s slopes (Conklin, 1974; Conklin, 1980; SITMo, 2008). Arrangement of these landforms varies across Ifugao. In Chapter 6, I further discuss these variances in relation to UNESCO’s monitoring and evaluation of heritage clusters.

² Also mentioned in my previous MA dissertation titled, *A site of tensions: Negotiating access and autonomy in the Rice Terraces of the Philippine Cordilleras* (Cagat, 2010).

It is important to note the significance of water in site selection for the construction of a field, since water needed for irrigation emanates from the *muyong*, and the irrigation of fields relies on water run-off. Guimbatan's (2003) and Ananayo's (2012) studies on the engineering of the Ifugao's irrigation system underscore how water must not only be diverted, but also moderated. Irrigation ditches are arranged horizontally, snaking across the landscape so that water loses speed as it enters the pond field. The gradual flow of the water to fields is likewise regulated through the use of bamboo pipes placed at an angle that follows the course of the water while reducing its speed (Guimbatan, 2003; Ananayo, 2012). Presently, PVC pipes and hoses now join bamboo pipes as water conveyors.

Irrigation sources are shared by a 'supradistrict region' via rights to a designated watershed area (Conklin, 1980: 6). Cooperative work is shared between agricultural districts consisting of hamlet clusters, in which farmers sharing a community irrigation system manage their section of that channel. Due to the value that Ifugaos placed on individual autonomy, there is no customary law that obliges farmers to cooperate in the repair of irrigation system. Despite this autonomy, as farmers have noted, people cooperated with the tacit understanding that their participation is self-beneficial and such work involves food provisions for those who laboured in the task. Non-cooperation may also lead to alienation and judgement from fellow cultivators in one's district.

The sharing of water is also not conflict free. Tensions may arise amongst tenant farmers, as much as between owners and tenants. However, conflicts are often glossed over and persist only as masked tensions, especially if such issues are between kin. In one instance, a landowner (A) spoke about a tenant farmer (B), cultivating a field upstream, who was withholding water from landowner A's tenant farmer in a field downstream. However, as expressed by landowner A, although she spoke with the owner (B) of the upstream fields, not much could be done, since tenant B and landowner owner B are kin, and similarly, both landowners are kin.

Since the *muyong* is crucial to the irrigation of rice fields, the maintenance of these forests is part of how children are inculcated to become mature Ifugaos. Protection of these areas is supported by social restrictions that prohibit resource ex-

ploitation. Anyone who exploits resources in the watershed area risks disapproval from fellow community members. Individuals are also admonished that cutting trees in these forests may displease *pinadings*, ancestors or deities, thus possibly causing misfortune to the culprit. As an elder related to me, management of these resources was essential to the education of young men, so that one's treatment of tress in forested areas demonstrates their maturity. As he stated:

You know when they're young and walking, they'll cut anything with their bolos (machete), and they accidentally cut saplings, especially. When they do that, of course they get scolded, so they learn.

Although, management of the *muyong* is constituted in Ifugao mores, this did not preclude overcutting or the clearing of land for the cultivation of trees that mature more quickly, both of which serve commercial wood-work activities (Guimbatan and Baguilat, 2006: 65). Community members do not express current agricultural woes as retribution from deities, ancestors and spirits as a result of the living's changing practices that undermine Ifugao principles. Rather, the exploitation of resources is perceived as a result of inadequate options in supplemental income. In this case, people are going against moral values to undertake activities that are necessary or supplementary to household income. As community members asserted, their children now need more than just land.

Overcutting of timber products in the *muyong* and clearing of land have decreased water sources for irrigation and destabilised the soil, increasing the likelihood of erosions. As Strang notes, water is characterised by its "transmutability and sensitivity to changes in the environment," (2004: 49). In this transmutability, the various states and quality of water are "endlessly reversible" and "always there in potential" (ibid). Water fills and take the shape of contained terraced fields, it mixes with soil with desired (for making fields) or damaging effects (i.e. erosion), or it may simply disappear. As water becomes less available, and as erosion damages irrigation channels that divert water to pond fields, farmers are compelled to further act against enduring values of stewardship. Such is the case in the siphoning of water from Ambuwayya Lake. Changes in the flow of water from forest to pond field re-

sulted in an undesired flow of water from lake to field. In a subsequent section, I particularly discuss this in relation to rice fields being contaminated with eels.

While the practice of sharing water sources is still observed, the maintenance of irrigation sources have been neglected by some communities as a result of more centralised governance. Previous irrigation management involved agricultural districts consisting of farmers who cooperatively manage irrigation canals that directly serve their fields. Eder recounts a failed government irrigation project in Banaue during the early 1950s, which functioned for several years and provided employment for some villages. Ultimately, it “fell into complete disuse” since irrigation channels ran through village settlements that were not usual collaborators in local water management (1982: 112). As Eder argues, centralised management of water supply may actually destabilise agricultural production (1982: 114). The centralisation of local governance regarding irrigation management has reduced community members’ motivation to carry out the previous practice of *ubbu*. With funds provided by the National Irrigation Authority to employ local residents to maintain irrigation channels, community members hesitate to voluntarily complete a task which would otherwise be compensated (Eder, 1982: 110; Nozawa, et al., 2008: 75).

In an ethnography on issues of ownership and management of the River Stour in Dorset, Strang notes that in the shift from local management to a more centralised one, water undergoes a ‘de-socialisation’. In this case, centralisation ignores the “reality of local, specific human-environmental relationships” and divorces “the medium through which individuals can identify with a locale and its other inhabitants” (2004: 246). One of the reasons for the Ifugao Rice Terraces’ move to the World Heritage in Danger List is in fact, the irregular management of irrigation sources, resulting in water scarcity and terrace abandonment (United Nations Educational, Scientific and Cultural Organization, 2001; 2006; 2011). Though, as I discuss in the next section, the centralisation of irrigation systems impacted cultivators of Kiangnan in varying ways.

As noted in Chapter 1, ownership of land is recognised through *primus occupantis*, so that the first person who tills never-before cultivated land gains ownership of it. However, abandoned rice fields may be tilled by an individual, who does

not own the field, for as many years as the field has been abandoned (Barton, 1919: 42). Previously, for non-heirs with no possession of rice fields, two main systems of tenancy were formerly practiced in Kiangnan. This included a crop-sharing agreement whereby, an owner of a field provides the seeds to be planted and bears the expenses for rituals, while cultivation is undertaken by the tenant. Harvest in this case, is divided equally. The other tenancy is defined by a cultivator's cultivation of idle land. A tenant undertakes all the work necessary for cultivating the land for as many years as it has been idle, but keeps all the harvest. In the next section of this chapter, I note how tenancy agreements have changed, in relation to the introduction of pesticides, fertilizers and out-migration.

While ownership of rice fields is perpetual, tenure for swidden fields are more transient. When swidden fields are abandoned and left fallow, this does not indicate the farmer's complete detachment from it. It is only once the field has been overtaken by vegetation, and requires clearing that another farmer who clears the field can cultivate the plot. In this way, swidden fields are more about ownership of the crops cultivated than the actual land (Barton, 1919: 44). Similarly, public woodlots may in fact consist of private, family-owned trees. Even water irrigation of rice fields were not completely egalitarian or private, but were managed through cooperation and community stipulations.

Ifugao customary laws account for the ownership of water sources for the irrigation of rice fields. Such laws detail not only claims to water sources, but also the sharing and maintenance of irrigation sources (Barton, 1919). According to Ifugao customary laws, the owner of the first rice-field below an irrigation source is entitled to all the water needed for his field, but cannot withhold this water from subsequent fields below him. While subsequent fields have rights to such water, they also may not abuse this right to the detriment of upper fields. Lower fields may also not channel water from the source directly to their field, bypassing fields in between (Barton, 1919: 59-60). In this way, the matter of irrigation is more about access and the capacity to benefit, rather than simply a case of property and ownership (Ribot & Peluso, 2003). In Chapter 4, I further discuss the multipurpose use of irrigation

channels and the availability of water for agriculture in relation to the operation of the Ambangal Mini-hydro Plant.

In cases of boundary disputes or the sale and purchase of ancestral property, in Ifugao customs, the role of mediator falls on the *munkalun* (go-between). These negotiators must be neutral and are tasked with persuading both parties to reach an appropriate settlement. For this reason, to ensure the fairness of settlements, a *munkalun* must have extensive knowledge of Ifugao laws and values and the concerned parties' genealogy (see Chapter 1 for importance of kinship in conflict resolution). Similarly, the *munkalun* must be trusted as having good character. The deployment of go-betweens is still presently practice, for settling individual or community boundary disputes. As I discuss in Chapter 4, the National Commission on Indigenous Peoples particularly recruit village *munkaluns* when settling ancestral domain boundary disputes between communities.

While I have outlined land-use and tenure, I must note that in discussing agricultural labour, I focus mainly on the cultivation of wet-rice, as this was of greatest concern to the cultivators of Kiangnan and the focus of conservation efforts. While agricultural rituals in Kiangnan were no longer practiced at the time of my residence, the techniques for the cultivation of the *ipugo* rice variety continue to guide present cultivators. Previously, in the planting of *tinawon*, agricultural tasks begin several weeks after the harvest. In September, small-groups of cultivators take to the terraced field to uproot decaying rice stalks to make *pingkols* (compost mounds).

In making *pingkols*, one steps into the partially irrigated rice field, where one's leg is buried at least up to mid-calf in cold mud. Pulling out the stalks also requires a bit of force. In my own participation at making *pingkols* in Nagacadan, I had to make an effort to pull out the stalks without losing my balance in the slippery mud of the pond field. Once uprooted, the stalks are piled onto each other, until they form a mound of mud and rotted stalks nearly one meter high. On the field they almost resemble the shell of a giant tortoise. Such mounds are dispersed across a field and it is on these mounds that cultivators will plant onions and leafy vegetables that will be harvested by December. Besides allowing cultivators to plant supplemental

crops when the field is fallow, the *pingkol* also serves as an organic fertilizer for the field.

During this off-season part of the agricultural year, any repairs on the terrace walls are undertaken through a practice called *tuping*. Cultivators use long-handled wooden or metal spades to loosen stones, or smooth out the clay for the walls and dikes. Field walls throughout the province varies, and likewise within a municipality. Stonewalls are common for steep slopes in higher altitudes, while clay walls are preferred for gentler slopes in lower altitudes. For stonewalls, small river stones or fragmented large boulders are used, with bigger stones being utilised for taller terrace walls that are required on steeper slopes. After a landslide damaged a cluster of terraced fields in Batad (a heritage cluster), Save the Ifugao Terraces Movement organised with farmers from Nagacadan (another heritage cluster), who wanted to assist in repairing the stone-walls. Cultivators from Nagacadan expressed that stone-walling in Batad was different from their own technique of stonewalling. As one cultivator related, using a *gaud*, spade from another village never quite feels the same as the spade one uses on their own field. The design of a spade takes into account the type of soil and stones that are used for building the walls.

From December to January, planting of the seedbed begins. Seedbeds are planted in a section of the terraced fields, whereby panicles from previous harvests are laid directly on the soil. Previously, carefully chosen seeds were managed by women, who traded productive seeds amongst kin and fellow cultivators in their district. Seedlings from these seedbeds will then be planted a few weeks later, in February. As acquaintances related, putting seeds too close together would stifle the leaves, thereby decreasing the panicles to be harvested. On the other hand, planting the seedlings not close enough to each other would be a waste of space and likewise produce less harvest. Therefore, seeds must be strategically dispersed as to maximise space, without stifling the crops' potential to grow tall and robust. For those who have experienced cultivating as a child, I was told that you learn this ability rather early on, as making mistakes in planting seedlings often resulted in a scolding.

The rice is harvested in July/August by a small group of cultivators, previously this was the activity of women, but more currently, men can likewise be found

harvesting. *Tinawon* stalks are much higher and go above the waist, one harvests *tinawon* rice standing up. Unlike lowland rice where a *gapas* (sickle) is used to cut the panicles from the stalk, with *tinawon* rice, a *gamulang* (small knife) is inserted between one's ring and middle finger, and the panicles are cut from the stem. Once the panicles are collected to make one bundle, a leaf blade can be used to tie the bundle of panicles together. Previously, the agricultural cycle was opened and closed by the *tumonak* (agricultural leader), whose sponsoring of rituals and feasts mobilised labour. The work of rice-cultivation was undertaken through the practice of *ubbu*, a reciprocal work arrangement in which farmers work on each other's fields and *baddang*, in which meals are provided to those who provide labour.

As I noted in Chapter 1, the organisation of labour involves both kinship and territorial affiliation, as co-residents in an agricultural district may recruit each other for labour, but likewise, one can recruit kin from another agricultural district, if needed. Though, as I detail in the next section, people's movement within and outside of the province has caused varying opinions on the availability of labour and the abandonment of rice fields. Just as labour must be organised, the cultivation of rice fields is synchronised in order to regulate water needed for irrigation and to manage the impact of pests. While the Kiangnan community no longer practices the process of having a *tumonak* signal the start and end of an agricultural cycle farmers still attempt to synchronise agricultural activities. However, as I discuss in the subsequent section, due to the cultivation of grains that have varying rotation periods, the decreased availability of water and increased need for pesticides or fertilizers, synchronisation has become more complicated.

When people consider agricultural activities, farmers and non-farmers alike frequently mention that work undertaken for rice-cultivation go beyond the field. In this case, community members are referring to the labour rituals for rice cultivation previously demanded. Each ritual required the sacrifice of a chicken or chickens, other rituals require an additional pig, with the pre-harvest and harvest ritual requiring the most sacrifice, with the *tumonak* sponsoring a feast to feed all those in their agricultural district (Barton, 1946: 110-126). In Barton's own early account, he observed the weakening correspondence between the execution of rituals and the

agricultural system. Years before the 'Green Revolution', Barton documented that Ifugaos were already cultivating two crops a year, with farmers supplementing the *tinawon* (year-long crop) with a second cropping of rice (1946).

As Barton describes, a second cropping made "agricultural rites crowded together more closely than before" (1946: 109). While the second-crop sometimes yielded a larger harvest, the new cropping system concomitantly lowered the standard of rice cultivation (1946: 110). Conservation agencies likewise often tie the abandonment of techniques (inclusive of rituals) to the weakening ecological soundness of farming practices, and the eventual deterioration of the terraces (United Nations Educational, Scientific and Cultural Organization, 2002: 12; United Nations Educational, Scientific and Cultural Organization, 2006: 7). In efforts to safeguard the Ifugao Rice Terraces, the Ifugao community, are burdened with the responsibility of continuing the work for a particular agricultural system and the rituals they require.

Before the introduction of low-land rice varieties, the Ifugao's agricultural technique consisted of rituals that corresponded with a year-long season. Such agricultural techniques demanded the enactment of rituals which correspond to the efforts already devoted to the field. During an exit consultation forum I attended at the culmination of UNESCO's monitoring visit, a community member from Hungduan memorably approached the lectern, and with passion, proclaimed an oversight in the need to restore the cultivation of *tinawon* with its accompanying ritual. As the elder gentleman noted, expectations for Ifugaos to uphold rituals must stipulate the dispersal of the animals needed for sacrificial offerings, since the supply of animals currently raised in each of the municipality is acutely insufficient for the present population that are now expected to participate in agricultural rituals. Likewise, the cost of rituals become even more salient when one considers that prior to World War II, a bundle of rice was 20 centavos while a piglet was one to two pesos. By the 1980s, a bundle of rice was worth two pesos and a piglet required 80-100 pesos (Eder, 1982: 111).

In providing an overview of the labour and investments that wet-rice agriculture necessitates, this chapter serves to introduce issues regarding the link between

natural and social resources, which will be further explored in subsequent sections. Particularly, the issues I discussed here relate to heritage management and how various actors reflect on the following: the Ifugao's changing agricultural practice, out-migration and tourism. It likewise considers the community members' concern for the development of their children, the province and an agro-ecosystem that sustains more than just physical bodies. What I hope to underscore in this introduction of the Ifugao's wet-rice cultivation and a historical context of its transformation is that the need to merge conservation and development has not just newly emerged. Rather, Ifugaos have long considered such a dilemma and continue to do so.

(TRANS)PLANTING

Due to the geographical location of Kiangnan, and its varied topography, communities in the lower elevated areas of Kiangnan became the "center for crop introductions and innovations, which subsequently spread throughout Ifugao" (Klock, 1995: 9). Father Juan Villaverde, a Spanish missionary was particularly concerned with introducing more productive and intensive agriculture. To Villaverde, the year-long rice variety cultivated did not seem sufficient and he subsequently encouraged locals to plant a second crop on the rice fields after harvesting the rice. Ironically, in the next century, American anthropologist, Barton, would later lament that Ifugaos were beginning to practice a two-cropping system, thus affecting their rituals. In Kiangnan, fields in lower altitudes were well-suited for lowland rice varieties. Farmers from lower fields of Ambabag and Pindongan note that cultivation of lowland rice began as early as the 1950s and were distributed by the Department of Agriculture. The practice of double-cropping became more pervasive and wide-spread in the advent of the 'Green Revolution' in the 60s and 70s. Hybrid rice created by the International Rice Research Institute was touted as having the potential for making rice into a cash crop and fulfilling subsistence needs not satisfied by the Ifugao's *tinawon* (year-long) variety.

However, areas of 'Ifugao territory' in higher altitude avoided the dramatic changes that transpired in other parts of the Gran Cordillera. Transitions which did

occur, did not elicit the sort of turmoil experienced by communities in lowland Luzon. In the lowlands, Spanish and American colonial administrations created *haciendas* (large estates), whereby tenant farmers laboured for Spanish landowners or Filipino elites. Such relations were based on a patron-client relationship; in exchange for the tenants' labour, landowners provided aid to their tenants, aside from a share of the harvested crops (George, 1980; Wolters, 1983). In his analysis of peasant revolts in lowland Philippines, Kerkvliet suggests that a rising population, decreasing access to land, landowners' preoccupation with capital and colonial policies intensified the insecurity faced by villagers of Central Luzon. Such conditions, "made the landed elites less paternalistic and less interested in tenants as clients," since, cash and land became the landowners' primary resource, as opposed to their dependence on tenant farmers (Kerkvliet, 1977: 25).

Peasant rebellions against land-owning elites continued throughout the 20th century. The armed revolt, known as the Huk Rebellion, continued in the 40s, during Japanese Occupation, and well into the years leading up to Philippines' independence in 1946. Such revolts would later be subdued by the Philippine government with aid from the American military force (Kerkvliet, 1977). Though Ifugao evaded the political turmoil which arose from the 'Green Revolution', the introduction of high yielding rice varieties nevertheless had significant social and ecological impacts. In Ifugao, the shorter months needed for the high-yielding varieties meant that farmers continuously planted rice all year, with very little or no time allocated for leaving the fields fallow. Though, unlike the lowland agricultural communities, Ifugao cultivators have expressed their adoption of 'Green Revolution' farming techniques as a voluntary choice, and not one of political coercion. Actually, even whilst promoting 'Green Revolution' farming techniques, the state recognised the Ifugao Rice Terraces as a cultural landmark (Presidential Decree 260, 1973).

In Lansing's analysis of irrigation management in Bali, he details how the locations of farmer's fields shaped the 'Green Revolution's' impact on the utilization of water temples in Bali's irrigation system. According to Lansing, the adoption of state agricultural policies differed between communities upstream and downstream, whereby farmers downstream faced greater threat of penalties and thus succumbed

to state policies more readily (1991: 114). Within the province of Ifugao, and even within the specific municipality of Kiangnan, the altitude of rice fields resulted in the inconsistent pervasiveness of high-yielding varieties. While particular strains of the lowland varieties suited areas of Kiangnan in lower elevations (including Ambabag and Pindognan), such grains do not thrive in the slightly colder and wetter villages of Nagacadan and Julongan, or villages in the municipality of Hungduan, all of which are located in higher elevations. In such areas, lowland varieties were not so rapidly pervasive, and indeed, farmers in higher villages continue to cultivate *tinawon*; although, non-indigenous highland rice varieties more suited for the higher elevations have been introduced.

All farmers in Ambabag, and in general most farmers in Kiangnan, cultivate high-yielding varieties, with the exception of the farming communities in the heritage clusters of Nagacadan and Julongan, where they continue to plant *tinawon*, though without undertaking agricultural rituals. However, I must note that even in the heritage clusters, where planting *tinawon* is a criterion for inclusion as a heritage site, some farmers cultivate rice varieties introduced by the Department of Agriculture. Farmers have also confirmed using fertilizers and pesticides in a targeted manner, though, not in the frequency as experienced by rice cultivators in the lower villages of Kiangnan.

The first planting season of high yielding varieties occur in December/January, with grains that are taken from seedbeds planted on the field weeks prior. During this time, early in the morning, I would encounter farmers of Ambabag walking to their fields, with some, carrying a vat of pesticides strapped to their back, while clutching the spray wand attached to the containers. At other times, amidst the large span of green fields, farmers move along the fields, dispersing fertilizer. Rice from the first-cropping is harvested in May/June. The second cropping schedule is from July/August and harvested in November. Generally, varieties of shorter durations are cultivated for the second cropping. Depending on the grain planted the cropping period last for three, four or five months. Previously, with the planting of *tinawon* and the performance of rituals, the *tumonak* signals the start and end of the agricultural cycle, and other farmers follow suit. As the practice has been discon-

tinued, many cultivators note that farmers now just start when they can in relation to the availability of pesticides, fertilizer and water for irrigation. As one cultivator described, the process is more “*kanya kanya*” (‘to each its own’, Tagalog).

However, while farmers start on their own time, efforts to coordinate schedules with neighbouring fields still persist, for the sake of regulating irrigation of the fields and to minimise destruction of fields from rats. In this case, if neighbouring fields are planted in synchronicity, rats dispersed to the various fields, and the damage is distributed. However without this coordinated schedule, rats can decimate the growing crops in one field, and then following that, migrate to another field that has been cultivated at a different time. For instance, those cultivating a 5-month variety plant earlier than those planting the 3-month variety. So while farmers plant at different times, the crops are harvested at the same time. During planting and harvesting, farmers continue the practice of *ubbu* (cooperative work). At harvest time, bundles of high yield variety rice are threshed with a mechanised thresher. In this case, those who use the thresher must give the owner of the equipment one sack of rice per ten sacks of rice that has been threshed. The expense of gas and labour is borne by the owner of the thresher.

Despite cultivating high-yielding varieties, many farmers have admitted to the prestige of the *tinawon*. Previously, I have noted the distinct materiality of rice as a food-stuff that expands when cooked in water. Rice in this case, as it expands, allow for the growth of the people it nourishes. What is especially significant with the *tinawon* is that the grain is fuller and bigger than other rice varieties, thereby more nourishing. On the other hand, its aroma and texture is considered of superior quality in comparison to the high yielding rice varieties. *Tinawon*, identified as heirloom and organic, is promoted as artisanal food stuff on the tourist market. Philippines’ Department of Trade and Industry promotes a One-Town-One-Product (OTOP) scheme, in which municipalities determine a town product and market it. In many Ifugao municipalities and villages, particular food items are promoted as artisanal foods. Among such products are: taro biscuits from Kiangnan or organic coffee from Lagawe and Mayoyao.

One Pindongan resident, who is half-Ifugao, half-Ilocano, recalled his father’s

own decision to transform his farming practices. As this resident noted, his father became one of the first 'volunteers' to try the new seeds, as they were being introduced and dispersed by the Department of Agriculture. The resident, married to a council member originally from Banaue, began to make comparisons with the situation in Batad, where they still practice rituals. While the couple admitted that such rituals would be a wonderful event for their children to experience, they nevertheless expressed their preference for cultivating high-yielding varieties over the *tinawon*, since planted *tinawon* are rarely sufficient for family consumption, and its rituals are deemed as a luxury.

The planting of high-yielding varieties for greater yields with less labour, has however, made crops more vulnerable to the vagaries of weather, since fields are now cultivated during the height of the typhoon season, which can damage crops. The months between July-December are also crucial, since these months are affected by extended dry seasons. With the planting of *tinawon*, the fields would have been left fallow during these months. While speaking with a farmer, I posed the question of what can one do if it suddenly rains strongly when the panicles are mature, and the response, said with obviousness, "Well then we can only pray that it is our field that is spared." In cases of heavy precipitation with strong winds (not even necessarily typhoons), the maturity of the grain is compromised, thus resulting in empty rice husks.

Such a scenario would be particularly worrying since one cannot prevent such an event. This unfortunate circumstance would be considered a double loss of investments: the work exerted in planting would have been done in vain and the eventual yield would be lost. Such problems are more commonly encountered, especially as high-yielding varieties have transformed the agricultural cycles. In light of extreme weather conditions and the fragility of the changing agricultural ecosystem, phrases like 'God-willing' (often said in English) and 'we hope and pray', have become the mantra of community members. For farmers, the act of praying for better weather or for protection against weather comes from full awareness of the unpredictable factors accompanying the cultivation of crops. Though as de la Cruz notes, the potency of prayers is that they absorb "possibilities and opportunities

that we might recognize as emblematically political” (2012: 177). In this case, prayers depoliticise the dependencies and socio-ecological impact of ‘Green Revolution’ that I discuss further in this section.

In Scott’s noteworthy ethnography on resistance and protest among an agricultural community in Kedah, Malaysia (1985), he insightfully detailed how the ‘Green Revolution’ transformed patron-client negotiations in a way that is disadvantageous to tenant farmers. As Scott noted, mechanization, along with the land and capital needed to benefit from the use of fertilizers and pesticides, largely increased the income of the rich. Inversely, such introduced technologies limited labour available for tenant farmers, thus exasperating class disparities. In Ifugao, the province’s mountainous terrain, along with the smaller size of landholdings, prevented the mechanization that would have resulted in the redundancy of labour workers, thus protecting Ifugao tenant farmers from the same fate as the farmers of Kedah. Actually, the ‘Green Revolution’ had the effect of paradoxically giving tenant farmers more independence, and freeing landowners from sponsoring expensive agricultural feasts. However, new costly dependencies emerged, as farming rice now necessitates chemicals, the regulation of which is controlled by agricultural policies that can make available or prohibit the use of particular pesticides.

I must mention that the pesticides and fertilizers needed to maintain high-yielding rice varieties are costly. Currently, there are two common tenant-owner agreements in place within Kiangnan. Farmers have the option of a 50-50 agreement, whereby tenants and owners share all the costs, while also equally sharing the harvest; the other option is a 70-30 agreement, in which farmers burden the entire cost of agricultural inputs, while keeping a greater share of the harvest. Tenant farmers I spoke with have expressed that they prefer the 70-30 agreement, since they can independently conduct their agricultural activities without necessarily waiting for assistance from landowners. As cultivators expressed, some landowners do not actually live in Kiangnan, but instead live in Lagawe or Lamut and thus cannot properly address inputs needed for cultivation.

Landowners on the other hand bemoan that finding tenant farmers is becoming more challenging. One community member, a pensioner who was previously a

civil employee noted that he has returned to farming since his retirement. In his decision to do so, he noted that this was something to do now that he has spare time, but also because there were less and less reliable tenant farmers. As he noted:

It is very hard to find tenant farmers and labourers, it's one of the reasons I've come back to farming. Most people are becoming professionals. Even today you do not even see many people around to farm. Some people who can buy land, instead of farming their fields here they are buying land in the lowlands (referring to Lamut, Ifugao and Nueva Vizcaya), or people are going abroad. It used to be that people would come in from other villages, from the other side of the mountain, but not anymore.

The implication of this statement is that while the landless previously moved within the municipality or across provincial boundaries to work as tenants or to find uncultivated land, this has been replaced by out-migration. However, it must be noted, that unlike what is implied by anxieties in regards to abandonment of rice terraces, out-migration has long been practiced in Ifugao, as farmers engaged in wage labour during the periods between planting and harvesting (Barton, 1922: 417).

Tenant farmers are less anxious regarding the abandonment of rice terraces. Many of them note that there will always be a need by someone to farm, and even those who do emigrate from Ifugao, at some point return as farmers even if just transiently. As one cultivator pointed out, it is in fact those with the wherewithal to leave Kiangnan that are most preoccupied with abandonment. As he expressed:

Well how lucky for them to be able to let their kids leave. It's a privilege for them to leave. Actually, it's good that there are people who stay and still farm, because then what else will the rich eat? They also cannot live without rice. You need these two groups, because if we were all rich, we'd all leave, there would be no one left farming.

As farmers likewise note, farmers who own smaller holdings, but have less means to hire tenant farmers, ask their children to assist with farming.

Most parents talk about being able to provide education for their children. Many understand the future generation's aspiration for careers other than farming, yet what most community members point out is that not everyone achieves their plans. Rice-cultivation however, provides a certain security so that resources are

available to keep someone from the destitution that Kiangnan communities associate with urban dwellers of Manila. Interestingly, as I address in a later section, future generations of Ifugao have a renewed interest in rice-cultivation in ways that support their professional aspirations. Professionals also invest in activities related to rice-cultivation.

The movement of landowners to more commercially developed municipalities has made cultivators more independent in organising the inputs and labour needed for rice cultivation. However, the necessity of fertilizers for hybrid rice varieties has limited their independence on pest management. Previously, synchronisation of farming schedules, along with the making of scarecrows, traps and noise-makers needed in a ritual were sufficient in the Ifugao's capacity to manage destruction caused by pests such as rats, birds and insects. The ongoing practice of synchronising farming schedules continues to be a strategy for minimising the damage of pests. However, currently, pests are no longer seasonal or external to the fields, but in fact dwell within the rice fields. The introduction of such species was often part of a scheme to increase alternative sources of protein or as part of livelihood projects. However, rice field-aquatic species are not novel to Ifugao.

As Conklin previously documented, mudfish, snails and other aquatic fauna were integral members of the agro-ecosystem (Conklin, 1974: 438). Farmers raised fish in the paddies, with the practice of creating fish ponds in the field. This practice requires digging a rounded trough deeper than the surface of the irrigated field. When the field is irrigated, there would be more water contained in the fish pond than the inundated field. These troughs called *tauk* must be deeper than the actual rice field, since fish must be able to swim within greater depths, to escape the sun's heat. Due to the pesticides and fertilizers inputted in the fields, along with frequent consumption of these fauna, the presence of such species became less prevalent (in some cases extinct). As I have noted in the previous section, erosion and diminishing water caused by the overuse of trees in the *muyong* have also resulted in less water supply for some fields. In choosing between keeping water for fish pond in the fields and having more water to distribute amongst rice-fields, irrigation for rice takes precedence.

Farmers in Hungdudan also continue to raise fish within their irrigated fields, and these small fish, called *yuyu*, were introduced by the Japanese during their occupation of Ifugao. These fish have actually become Hungdudan's town product. However, while the *yuyu* thrived in Hungdudan, without causing problems for rice-cultivators, introduction of aquatic species in the Kiangnan rice fields resulted in a dissimilar scenario. As a response to the diminishing fauna in irrigated rice fields, species were introduced to Kiangnan's agricultural system by various actors (volunteers and entrepreneurs) and with support from the local government. The introduction of such species was often part of a scheme to increase alternative sources of protein or as part of livelihood projects.

Current aquatic species, which have now made the rice-field their habitat, have caused more difficulties for farmers, rather than providing a food resource. As expressed by my interlocutors, among the most frustrating of these pests are the *kuhol* (golden snails) and eels. Many farmers could not affirm how the *kuhol* were introduced in Ifugao, with reasons given ranging from: being a Japanese development project, a government initiative, or the ill-conceived actions of fellow farmers. As reported by studies on invasive aquatic species in Philippines, the snails were introduced to local government agencies by entrepreneurs who were intent on marketing snails for consumption and livelihood generation. However, while the *kuhol* was viable aquaculture when contained, they became destructive once they escaped into streams, rivers, irrigations and eventually rice fields (Caguan & Joshi, 2002; Guerrero, 2002). These herbivorous snails devour newly planted rice along with useful plant life in the fields that are essential in the fertilization of the soil (Save the Ifugao Terraces Movement, 2008: 23). The eels on the other hand, were introduced by a Peace Corps volunteer, and while in Kiangnan, I was associated with him on the basis of my being American, so frustrations were often expressed to me.

As explained by farmers, the eels burrow holes, causing seepage in the rice fields, thereby necessitating an increase in the amount of water required to inundate the field. Likewise, in burrowing holes within the rice field, eels loosen the soil, making walls more vulnerable to erosion (Photo 3.1). Some of the farmers also explained that because of the eels, even when there is sufficient water flowing through

the irrigation channels, it becomes inadequate once in the irrigated field, due to the water seepage. While the issue of the *kuhol* is ubiquitous throughout Kiangnan and Ifugao, the issue of eels was by and large restricted to the lower fields of Kiangnan, unfortunate enough to be in the vicinity of where the eels were farmed, and connected through various community irrigation systems. In Nagacadan, a concern for the eels was not prominent.



Photo 3.1: Pockmarked Pindongan Rice Terraces

Though many are quick to cast blame on the Peace Corps volunteer for the introduction of eels, few have also admitted that the escape of the eels from Ambuwayya Lake and their eventual contamination of rice fields may have been the product of residents siphoning water from water sources such as the Ambuwayya Lake. Water is not only a substance, but a medium (Ingold, 2007: 26), thus, it moves, just as much as it allows for others to move through and with it. While some acknowledge that unsound siphoning of water from the lake is the cause of field contamination, many are also not likely to loudly vocalise their judgement or readily cast-stones on those who engage in such dubious practices. Particularly, residents are less likely to vocally criticise those who are their kin. Similarly, there is an understanding amongst residents that while siphoning water from the lake is not ideal, such an act is also largely due to how farmers have responded to diminishing availability of water for irrigation. As some farmers note, the vagaries of weather conditions along with poorly maintained irrigation channels has exasperated the problem

of inadequate irrigation.

As one farmer mentioned:

During dry season, the water cannot flow to some of the rice fields. During those times we can only hope for water. There are others who have a hose so they can tap a water source, but other farmers cannot afford to buy the hose, so sometimes they do not till their rice fields if the season is too dry.

Yet, despite such sympathies, some cultivators and non-cultivators alike have noted that the siphoning of the lake should be avoided, though for varying reasons. Non-cultivators tend to cite the current state of the lake as one of the reason, while cultivators very rarely do, and are solely concerned with water seepage and erosion transpiring in the irrigated fields.

Even before the introduction of eels, Kiangnan has had a long-standing difficulty with the maintenance of irrigation channels and available water sources, for reasons I have pointed out earlier, regarding changes in the management of irrigation systems and the *muyong*. I must note, that depending on their nearness to water sources, problems with irrigation is more pronounced amongst certain agricultural hamlets than others. For instance in Ambabag, farmers from hamlets closer to Mount Kapugan, have noted that they have not faced too much challenges regarding the lacking availability of water. Yet, within the same village of Ambabag, farmers from hamlets sharing a different irrigation system have cited inadequate irrigation.

During such scenarios, farmers exercise a rationing of water based on a day and night schedule to ensure that at least each farmer is able to irrigate their field. In this case, those closer to the irrigation source use water at day time (fields in higher elevations) inundate their field during the day, then empty the water to lower fields so that these fields can be irrigated at night. Despite such strategies, irrigation challenges have been exasperated by more erratic weather of extended dry seasons or more destructive typhoons, which erode irrigation channels. Due to erosion in irrigation channels, water is not properly diverted to fields, and as such, some farmers are compelled to forego a second-cropping.

These undesired flows of water out of eroded irrigation channels and water seepages from fields caused by eels, along with diminishing availability of water from the *muyong* has in some cases mobilised communities to rely on previous localised management of irrigation. In both Pindongan and Ambabag, repairs of irrigation canals occur through the system of *ubbu*, twice a year, at the start of each cropping. Specifically, in Mungayang, those sharing the Umiyon community irrigation system, maintain irrigation canals through an active irrigators association, whereby they have established a scheme for sharing the responsibility. In the association, members pay a 50 pesos lifetime membership fee. After every harvest the members allocate three cans of rice from their harvest to the association, and this in turn is given to those who labour for the maintenance of the irrigation system. In speaking to farmers regarding the association, community members explicitly expressed no reluctance for joining the association, and in fact saw it as beneficial. Unexpectedly, farmers from these non-heritage areas find it even more necessary to continue with local management of irrigation canals, since unlike heritage clusters, they receive less funding and attention in regards to restoration efforts.

Despite, continued efforts at localised management, farmers just as easily assert that more permanent solutions to the problem of irrigation canals must be addressed by central authorities. For instance, in Amababag, farmers recounted, that after a typhoon in 2008, 200 meters of an irrigation channel was lined with concrete. The repair of the channel was funded with 100,000 pesos from the province's calamity fund. Concrete lining of channels has been the government's response to making repairs to community irrigation systems. Farmers see this as an improvement, yet community members (farmers and non-farmers alike) still express uncertainties over the durability of these repairs as they are in fact just as vulnerable to the ever-stronger typhoons that have battered Ifugao. Conservation agencies are also wary of concrete materials being used in any of the structures related to rice-cultivation.

The advent of hybrid rice varieties, fertilizers and pesticides concurrently transformed agricultural techniques and diminished the reliance towards the ritual system crucial to and supportive of the agricultural activities. It did so particularly

by altering the way in which pest management, seed selection, the organisation of labour and the agricultural calendar were carried out. Previously, rituals were integrated in the process of seed selection, in which seeds selected from the previous harvest were blessed to ensure their success and growth via sacrificial offerings to the gods. This process was made redundant by a grain that was no longer selected, but simply introduced and dispersed to the agricultural communities. The farming community gradually stopped negotiating with deities, and relying on the knowledge of female farmers to develop the most suitable seeds, practices that were carried out with the cultivation of *tinawon*.

Though 'Green Revolution' may have allowed Ifugao cultivators independence from deities and autonomy from landowners regarding agricultural inputs and decisions, it inadvertently produced new relationships based on dependences that restrict flexibility. The cultivation of particular rice varieties was once the farmers' own experiment, selecting seeds most favourable to, "the local micro-climates of each village, the elevation and the soil types of the terraces, the amount and seasonality of the water source" (Nozawa, et al., 2008: 73). However, the distribution and manipulation of seeds have been assumed by "national, international, and commercial crop research centers" (Frossard, 2005: 144). Similarly, cultivators admit that their ability to problem solve over pests management is as much dictated about what chemicals are banned or allowed. Currently, farmers eliminate eels by catching them and eating them as a side dish.

The Ifugao's forsaking of agricultural rituals, for agricultural practices that require less work, but could result in more or equal yield, should not be taken simply as a risk-management strategy or the act of hedging bets. Actually, farmers admit that despite new technologies and less arduous rituals, vulnerabilities and challenges have magnified, especially as it relates to erratic weather, lack of available water, pests and crop diseases. Likewise, the very transformations that reduced work, in relation to rituals, also came with new sets of dependencies, investments and tasks. Though in further sections of this chapter, I discuss how the repurposing of past agricultural techniques and revival of agricultural rituals has emerged in potential resources, with its own required labour and investments. As Buchmann writes, a ca-

capacity for adaption is not about finding a replacement for what is lacking. Instead, adaption relies on the deployment of 'local material and cultural resources to enhance social-ecological resilience' (2009: 707)

TOURS AND REVIVALS

Every summer, the town *fiesta* (festival) of Kiangang and other Ifugao municipalities are advertised in local and regional newspapers and local radio stations several weeks before the event. A large vinyl poster will also often be hung along a main road as a means of advertising the event. Colourful flags between lampposts are hung to make the atmosphere more festive. For the festival title, each of the Ifugao municipalities took on the name of an Ifugao celebration or a stage in the agricultural rite. Kiangang's town festival was titled, *Gotad ad Kiangang*. *Gotad* is an aspect of the *uya-uy* ritual (a prestige rite), and is a celebration which consists of dancing during the day.

Kiangang's *fiesta* consists of a float parade on the first day, native dancing and *hudhud* (narrative epic chant) competitions on the second day and games on the final day. On a rare, clear sunny day, I, along with Auntie Doring, her son, who was visiting from Lamut, Ifugao and his family, stood in front of a street junction, near the Protestant high school, which was the prime spot to watch the float parade for *Gotad ad Kiangang*. On this first day of the festival, residents of Kiangang came out in droves, shading themselves with large umbrellas, gathering along the sides of the street, in anticipation for each *barangay* (village) to showcase their float (Photo 3.2). Many had their mobile phones and cameras held up, ready to capture the floats and parade participants as they made their way along the street. This event draws both domestic and international tourists, and likewise, Ifugaos return to their natal village or that of their spouses' to partake in the festivities. That year, each of Kiangang's village recreated an agricultural ritual. While the annual town fiestas pay homage to the province's agricultural heritage, Save the Ifugao Terraces Movement, a local NGO, annually offers tourists the opportunity to partake in agricultural activities through Rice Cycle Tours.



Photo 3.2: Scenes from *Gotad ad Kiangnan*

Save the Ifugao Terraces Movement was established in 2000, as the Philippine Rural Reconstruction Movement, a Manila-based NGO, discontinued its Ifugao Chapter in the late 1990s. Nilo from Batangas and his wife Polen, an iKiangnan, were both former personnel of Philippine Rural Reconstruction Movement. Both served in different capacities, but were particularly focused in community organising. They were integral to the transitional period when The Philippine Rural Reconstruction Movement was in the process of completing their Sustainable Rural District Development Program, which focused on implementing small-scale infrastructures and natural resource management. I detail this further in Chapter 4, in regards to the organisation's small-scale renewable energy projects.

Former employees of Philippine Rural Reconstruction Movement's Ifugao chapter continued to work on completing the organisation's project, while likewise laying the grounds for Save the Ifugao Terraces Movement. As Nilo and Polen recalled, when Save the Ifugao Terraces Movement began operations, the NGO had only 500 pesos in their account, the money coming from the founding members of the organisation. Nilo and Polen expressed that during those early days, the founders of the organisation submitted proposals to funding bodies for the following initiatives: watershed management, micro-hydro project, health, indigenous knowledge school and an adopt-a-terrace programme. The hope was that the organisation would eventually acquire one of the grants. As Nilo expressed, heritage conservation was not at the crux of the organisation's objectives, but rather livelihood programs and

natural resources management. Though Nilo admits that during the early 2000s, funding bodies seemed to be more interested in rice-terraces conservation and as a response, the organisation has had to highlight that aspect of their operations. It was not until 2004, when they received their first funding from Philippine's League of Corporations, which funded a community based land-use mapping initiative in Nagacadan, which I discuss in Chapter 6.

The Rice Cycle Tour did not develop until 2005, when staff from the Philippine Rural Reconstruction Movement, wanted to participate in Ifugao harvest activities, and thus an EcoTours department of Save the Ifugao Terraces Movement was established to handle such requests. Save the Ifugao Terraces Movement organised 30 or so people to partake in such a tour. Following the popularity of this tour, in subsequent years, the tour was made available to the public, but community members were overwhelmed by the response. In fact, community members along with Nilo and Polen have expressed that those early years were a learning experience for them, to realise what number of visitors community members can cope with. From the marketing of the harvest activities, the tour quickly developed to allow members of the public to participate in other stages of the agricultural year.

The tour is taken mostly by domestic tourists and foreign student organisations with a connection to Kiangnan. Amongst the groups who annually take the tour are youths from a particular South Korean youth tourism company and a Catholic all-male high school from Australia with some connection to St. Joseph High School. From July to September, Kiangnan particularly welcomes a steady stream of Korean youth tour groups, whose visits to Kiangnan coincide with South Korea's academic term breaks. Members of the tour group, ranging from batches of grade-school, high-school and undergraduate students, reside with host families in Kiangnan for three to four days.

While Kiangnan has a government-run hostel, the general preference of tour-groups is immersion in which visitors are matched with families. As such, home-stays are arranged in households within Poblacion and villages in close proximity to Poblacion. Home-stays are not only promoted by the municipality's tourism office, they are likewise linked to the Rice Cycle Tours, in which Save the Ifugao Terraces

Movement distributes members of a tour-group amongst participating households. Other than tour groups preferring home-stays, Kiangang residents also feared a similar fate to Banaue Proper and resisted the idea of hotels and hostels being erected throughout the municipality. Many felt that this might cause over-crowding and pollution.

Since being a host included payment for accommodation and food prepared for guests, residents also felt that hotels would deny residents opportunities for supplemental income. Such issues were raised in a municipal tourism workshop, where community members of Kiangang were given a forum to discuss issues and ideas for developing tourism. In response to residents' preference for running home-stays, the municipal's tourism office also began organising home-stay workshops, training home-owners in hospitality management such as, table setting and bedroom presentation. It must be noted that those who participate in providing home-stays are households that must be able to provide a private room for tourists.

While tourists stay centrally in villages such as, Poblacion, Ambabag and Tuplac, the main highlight of their sojourn in Kiangang is a hike through the mountainous terrain of Nagacadan villages and across its terraces towards the hamlet of Bayninan. It is in Bayninan where tour groups contribute to the community's agricultural tasks. These tours coincide with actual stages of the *tinawon* agricultural cycle. As a volunteer, I joined the tour guides of Save the Ifugao Terraces Movement in leading the students on a hike through the village of Bayninan. Tour groups are gathered into a village-ran paved, open area, akin to a public square, where members of the Bayninan Farmer's Association perform a wedding dance or prestige rite dance for the students. The performers are donned in Ifugao attire. The women are dressed in a *lamma*, a white woven blouse and a *tapis*, a red woven skirt, with white and black patterns running across the skirt. The men on the other hand, are dressed in the *wanoh*, a G-string made of a similar woven textile as the women's *tapis*. After the performance of the wedding dance, visitors are then given a quick lesson and asked to join the celebratory dance. The dance is a simulation of what happens at actual Ifugao weddings, when wedding attendees are asked to partake in the wedding dance, as gongs are beaten.

Following the performance, students take part in assisting farmers with an agricultural task. The Rice Cycle Tours are carried out in a rather educational manner. While visitors are encouraged to participate in agricultural activities, at the time I was a volunteer, the tour itself did not involve a revival of an agricultural ritual. The tour mainly focuses on the demonstration and explication of agricultural activities, the agro-eco system of the Ifugaos and their link to other aspects of Ifugao life. Visitors are dispersed along a few fields with a farmer monitoring their tasks and making corrections. In fact, usually because of the groups' schedule, their visit often coincides with the harvest stage, and as such take part in harvesting. As mentioned earlier, due to the robust nature of *tinawon* rice panicles, one is surrounded by stalks of rice the minute one leaves the dikes and enters the fields. As I did on my first attempt at harvesting, visitors who have not anticipated how the rice leaf blades scratch, wear short sleeves or shorts to harvest.

During the tours, an Ifugao elder, designated as 'Indigenous Knowledge Holder', accompanies the students. Usually, the Ifugao elder who accompanies the group is a sprightly and outgoing, retired school teacher named Maria, who I referred to as Auntie Maria throughout my stay in Kiangnan. After having taught in the local primary school for thirty years, Auntie Maria and her late husband (also a former teacher) returned to being cultivators. Auntie Maria hails from Bayninan, Nagacadan and is well respected not only in the village of Nagacadan but across Kiangnan. Throughout the hike, Auntie Maria does the following: identifies mountainside tombs and describes funerary rituals; she points to plants and provide the Tuwali translation; describes previous agricultural techniques, and generally shares anecdotes of her own experience as a resident of Nagacadan. Auntie Maria's post-retirement activities aptly suit her, for even when not acting as a docent, in her own everyday interaction, particularly with younger generations, she is incredibly passionate and engaging when speaking about Ifugao practices.

The Rice Cycle Tours in the village of Bayninan necessitate the navigation of a semi-paved road, resulting in the added opportunities for a tricycle association, whose drivers are given preference towards operating on the particular route. The spatial engagements engendered by access to Nagacadan have created partnerships

amongst tourists, local government units, Save the Ifugao Terraces Movement and the tricycle association. Additionally, the strength of the Bayninan Farmers' Association organisation, and their affiliation with Save the Ifugao Terraces Movement's Rice Cycle Tours, has made the village a poster-child for ecotourism. This noteworthiness has caused Nagacadan residents to observe that Bayninan has come to represent the entire village, and visitors have come to collapse all of Nagacadan's hamlets into Bayninan, when in reality, Bayninan is but one hamlet in the village of Nagacadan.

As a courtesy, the village captain should be informed when tour groups visit Nagacadan. However, because some members of the Bayninan Farmers Association are likewise village council members, permission for visiting Nagacadan is taken for granted, with the village captain being bypassed. While meeting with council members I, along with a fellow researcher and volunteer for Save the Ifugao Terraces Movement, were informed of this oversight, because we were affiliated with Save the Ifugao Terraces Movement. As the village captain noted, the association and the village council should not be taken as one unit, since the council represents the entire village of Nagacadan, not just Bayninan.

While Save the Ifugao Terraces Movement have established ecotourism schemes in association with communities in the heritage clusters, some villages are more disconnected from the organisation. Mungayang residents in particular expressed a desire to develop tourism programs to lead tourists on white-water rafting trips along the Ibulao River. When I informed the young barangay captain of Mungayang about Save the Ifugao Terraces Movement's ecotourism programmes, he mentioned that he did not quite know about the organisation's activities. In fact, some community members assume that the organisation focuses solely on heritage clusters.

As Polen and Nilo have pointed out, one of the shortcomings of Save the Ifugao Terraces Movement is that they are only able to establish a connection with communities they work with, in relation to the projects they have funding for. Nilo expressed that to some degree, Save the Ifugao Terraces Movement is more recognisable outside of Ifugao, to foreigners and to national actors, than they might be to

some communities within Ifugao. Thus, just as material and spatial relations are integral to, and shape agricultural activities, they are also essential in the inclusion of rice-cultivation in activities beyond agriculture. For instance, the variation in altitude that created the continued cultivation of *tinawon* in more elevated areas, in contrast to the planting of high-yielding varieties in the lower parts of Kiangnan, are exasperated in the classification and management of heritage clusters. The heritage clusters for better-or-worse, increase community members' capacity to create opportunities via tourism initiatives or livelihood schemes connected to heritage conservation. The distinction placed on heritage sites makes them more recognisable to communities outside of Ifugao, and thus, more able to establish partnerships and alliances in support of their agricultural activities. Such is the case with the revivals of agricultural rituals.

While volunteering to welcome a South Korean youth tour group, I received a text message from my friend Ruel regarding a post-harvest ritual in Hapao, Hungduan called *Punnuk*. The *Punnuk* is dictated by the last day of harvest and signalled by Hungduan's *tumonak*. Thus, unlike annual events, its date cannot be heavily advertised months before its undertaking. The *punnuk* is a post-harvest ritual specific to Hungduan's riverside villages of Baang, Hapao and Nungulunan. The festival is part of the merry-making usually offered as a recompense for all those who participated in agricultural labour and as thanks for the harvest. It likewise serves to cleanse community members of the previous agricultural year and prepare them for the next year. This ritual is associated with the cultivation of the *tinawon* and occurs usually during the first week of August. While rituals are carried out only for the *ipugo*, a sacred type of *tinawon* that I have previously mentioned, farmers in Hungduan have since adapted the *punnuk* ritual to be carried out for *tinawon* rice in general, not exclusively the *ipugo*.

As I have noted in the previous chapter, water, especially in regards to rivers, is a salient aspect of Ifugao religion. In this case, water is both a life-giving and destructive force. In particular, the mythical origin of Ifugao's mountainous topography was caused by Wigan (a deity). After descending into Pugaw (earth) to hunt, Wigan decided to take a nap without realising that his rucksack blocked the river's

flow, causing water to rush and submerge villages along the way. The only two survivors of the flood were Kabigat and Bugar who escaped the flood by heading towards the peak of Napulawan (mountain in Hungduan). Previously, in Chapter 2, I mentioned that deities connected to rivers play a crucial role in reproduction rituals, whether in difficult birth rites or agricultural rituals. Among the important deities recited in agricultural rituals is Binonbong, a river god who is responsible for collecting and returning to the mortal Ifugaos, chickens, rice and pigs that fall into the river (Barton, 1946: 36). In Hungduan, sacrifices to Binonbong are offered during the post-harvest festival so that he may continue to bestow the Ifugao both rice, chicken and pigs.

The fact that bodies of water are linked to not just deities, but can also be the dwellings of *pinadings* (fairies), make them potential sites of danger. It is not uncommon for people to exercise caution, particularly around bodies of water, especially when drowning and illness can occur at the hands of a lake or a river. However, as I have previously detailed in this chapter, such rivers and lakes also become sites of dialogue over conservation and agro-ecological issues related to rice cultivation. In her essay on people's animistic attitude towards an 'animated and energised' landscape in southern Manggarai, Indonesia, Allerton describes a water ritual undertaken to renew the fertility of a water source essential to rice cultivation (2009).

Allerton suggests that concepts of anti-syncretism are important in understanding people's animist attitude toward the landscape, despite identifying themselves as Catholics. However, Allerton adds that rather than focus on the 'rejection of inculturation' it would be more productive to grasp the resilience of such relationships (2009: 272). Resilience in this case, does not mean unchanging or stable. Rather, our understanding of 'spiritual landscapes' must go beyond religion and elaborate upon the historical contexts that guide how people create "new forms of engagement forms with the agency of the land" (Allerton, 2009: 285). Focusing on the historical context of Ifugao's changing agricultural practices and the revival of agricultural rituals reveal aspirations, interventions and translocal connections.

On a scorching day in August, I, along with a troop of Hapao residents, hiked along the terrace dikes, towards the Hapao River. Those of us in Hapao started our

hike from the *tumonak's* home. Before we began to walk, we heard faint sounds of chanting and yelling from across the valley. We began to walk in a single file, simulating a march in preparation for a battle. Most of the participants wore Ifugao attire, with the men and boys wearing their *wanoh* (g-string) and the women wearing their *tapis* (skirt) and *lamma*, with some of the female participants wearing a casual shirt instead of a *lamma*. Some of the male participants likewise carried spears and shields, while some carried the *pakid* (long tree stem with a hooked end, sometimes used to hook fruits from a tree). A member of the crowd in front of the line also carried the *kinaag* (human-like figure made of rice stalks and vines). Across the valley, we can see the residents of Baang and Nungulunan. Garbed in their Ifugao attire, from far away, the residents of the two villages resembled a line of red dots moving across the yellowish landscape. As we reached the bank the boasting chants and screaming gradually amplifies, until we were surrounded with a cacophony of sounds: our own and that of the two villages (Photo 3.3).



Photo 3.3: Hiking down to Hapao River

All three villages meet at a confluence where a tributary flowing from Baang meets with Hapao River. Upon reaching the confluence, a *gopah* (ritual speech) is recited to praise ancestors and deities and to ask for their blessings. At the confluence, people were gathered around the river banks, with some seating on large boulders located on the actual river. As it was hot on that day, the female elderly had their umbrellas open, shielding themselves from the glaring sun. Some community members carried digital SLRs, eagerly taking photographs of the event, while the

youth held up the cameras on their smartphones to capture the event. The highlight of the festival is the participation of residents in the *guyuddan* (tug-of-war). In this case, two villages face off, as a member from the third village, not in competition, drops the *kinaag* into the river. The two villages facing off must hook their *pakid* around the *kinaag*'s arms and pull forcefully, until they either bring the *kinaag* to their side or pull the members of the other villages. The victorious village faces off the next village and then the two losing villages face off against each other. This process is repeated for the men's, women's, boy's and girl's tug-of-war.

All throughout, spectators from each of the villages tease and call out to each other, throwing mock accusations of false-starts or cheating. There's a great deal of laughter, with community members splashing water towards each other or men wrestling each other on the river after a tug-of-war. When each of the three villages have all taken turns challenging each other, all the participants and spectators alike partake in a swim on Hapao River (Photo 3.4). The swim is a cleansing, a relief from all the work of the previous agricultural year, and likewise an end to taboos observed during the harvest season. As I noted in Chapter 2, during funerary rites and during the harvest season, people abstain from eating foods associated with water such as seafood and leafy vegetables which withers upon contact with water. At the end of the festivities, the *kinaag* are thrown in the river to be taken away by the current.



Photo 3.4: *Guyuddan* at Hapao River

Winning the *guyuddan* signals that the triumphant village will have a bounty-

ful harvest, while a third place finish indicates that the unsuccessful village may incur some challenges in the coming agricultural year. In the year I participated, there was also a monetary prize to be given to the village that wins overall. Aside from the *guyuddan*, the villages also competed in several categories ranging from most spirited chanting to best *baya* (rice wine). Despite there being supposed winners and losers, the community members of the village who placed last, did not show signs of anxiety in losing. In fact, the atmosphere is quite lively and remains so even after the collective swim. After the event, some community members open their homes for people to visit with each other, and households serve snacks and rice-wine that has been prepared for the occasion. One spends the rest of the day jumping from one household to another, drinking, eating and socializing.

During the year I attended, the community was marking the 14th anniversary of the *punnuk*. I was informed that while the *punnuk* must be undertaken by a *tumonak*, funding of the post-harvest ritual has been supplemented or altogether assumed by *kadangyan*, who are not necessarily a *tumonak*. However, as my friend manang Karen noted, though her grandfather previously sponsored the *punnuk*, upon his death, it became too costly to continue, since the family preferred to invest in funding the college education of succeeding generations. Thus, the practice became dormant until it was revived in the late 90s. As a result of changing religious and agricultural practices and ideas about prosperity and status, investments in the potential progress of future generations impacted the undertaking of a ritual that was previously considered central to prosperity and status. Similarly, obligations to the future of children were prioritise over obligations to spirits and deities.

The revival of the *punnuk* was ignited through the personal and professional connections of iHapaos to individuals outside of Ifugao that brought attention to the previously dormant practice. iHapaos who have gained more financial resources, although not being the *tumonak*, also contributed to reviving the practice, with additional financial support of Kidlat Tahimik, a Filipino filmmaker who has become a close friend to some iHapaos. As community members expressed, what was lost during the dormancy of the practice was not simply the practice itself, but the sense of connection and camaraderie shared by three villages across a valley. It was noted

particularly by older iHapao that it would be a pity if the younger generation missed out on the festive environment that washes over the community during the *punnuk*. Though presently, Baang, Hapao and Nungulunan are officially considered three separate villages, informally, such villages are perceived as part of Hapao. As an acquaintance noted, residents of the three villages consider themselves to be iHapao (from Hapao).

While Heritage reports focus on younger Ifugao's disinterest in agricultural activities, I must note that in the *Punnuk*, and the town festivals, the youth are keen to participate. After the collective swim, as people started returning to their homes, it was the younger Ifugaos who were the last to vacate the river. Likewise, those who attend college in a differing province, or those who have migrated outside of Ifugao, still attempt to return to Hapao for the *punnuk*. Ruel is among such community members who attempt to return to Hapao for such occasions.

An iHungduan from Hapao, Ruel relocated to Kalinga after marriage, though he spends his time travelling between various places in the Cordillera and spends part of the year shuffling between Kalinga, Baguio, Sagada and Hapao. Though a former tourism officer for Hungduan, Ruel has since become an artist and researcher, focusing on photography which often features key issues and life in the Cordillera. Being an artist has allowed Ruel to travel around the world, among such places he has visited and resided in are Spain and the Bay Area in California. Ruel credits such travels and connections as further fostering his interest in his heritage, as he ponders how the context of cultural practices such as Ifugao music, textiles and agricultural activities can be reconfigured to make sense for current generations of Ifugao and to non-Ifugaos.

Ruel's mobility is not a rarity in Ifugao. In fact, Ifugao has had a number of international scholars studying overseas and presenting in international conferences, particularly on heritage issues. Marlon, the Director of Save the Ifugao Terraces Movement in fact often travels domestically and internationally for his work and EcoTour guides often travel across Philippines for training purposes. Amongst, Hapao's famous resident is an internationally renowned ice-sculptor, Gilbert Bergano Alberto, who resided in London. In a Hungduan town fiesta I attended, the art-

ist was also in attendance. At a booth, he carved vegetables and fruits in the shape of flowers and animals. Community members surrounded Alberto's booth to catch a glimpse of the artist and they queued to have their picture taken with him.

Additionally, there are associations of indigenous peoples from Cordillera in countries with a large population of Cordillera immigrants. One such association is BIBAK, which stands for the provinces of Benguet, Ifugao, Bontoc, Apayao, and Kalinga. As my acquaintances informed me, such associations sponsor their own cultural gatherings that resemble the town fiestas. Ifugaos residing within Ifugao will sometimes send a *tapis* (skirt) or *wanoh* (G-string) to community members abroad, where they are used for such important community or familial gatherings. As noted earlier, whether for the revival of post-harvest festivals or the town fiestas, Ifugao's within Philippines and those residing overseas also return to Ifugao to participate in community events.

Like Hungduan, community members in Amababag have made attempts to revive the *Bakle*, a post-harvest celebration which includes the making of rice cakes and rice wine, whereby such cakes and wine are distributed to community members. The *Bakle'd Ambabag* is financially sponsored by Philippines' National Commission on Culture and the Arts. Ambabag, though not being included in the heritage clusters, enjoys acknowledgement by its proximity and association to Bae, the site for which the footprints of a deity is located.³ Likewise, the village is in the vicinity of natural sites such as Mount Kappugan and the Uttu Waterfalls.

While this post-harvest ritual has taken place since 2008, at the time I resided in Kiangnan the event was not undertaken. As the barangay captain (head councilmember) informed me, organising the event requires a submission of expenditures to the National Commission on Culture and the Arts prior to the end of the fiscal year. Missing this submission date means that funds cannot be withdrawn to

³ According to a popular legend, early Ifugaos (particularly women) only chanted one type of *hudhud* (epic chants), one that calls on the deity Pumbakhayon. Growing tired of constantly being called upon, Pumbakhayon descended on a field in Bae – to the surprise of the women who were in the middle of farming – he then proceeded to teach the women other *hudhud*. Those who encountered Pumbakhayon died and only few survivors who overheard, but did not have direct contact with the deity were able to spread their knowledge of the new *hudhud*. Pumbakhayon's footsteps are said to be embedded in a large stone on fields in Bae, which has become a landmark.

fund the event, and thus, the celebration must be delayed until the coming year. So it seems the *bakle* should be a thanksgiving not only for the production of rice, but also for the funding necessary to that act of appreciation. The event in fact, elicits ambivalence from community members.

Some community members see the revival of the *bakle*, as a way of being able to continue some cultural practices such as native dances, *hudhud* (epic narrative chant) and the playing of Ifugao musical instruments. Parents note that they are happy for their children to experience an occasion that they themselves experienced when they were children. However, others note that in undertaking the *bakle*, the community spends more than they actually gain. As one of my interlocutors noted, “They (National Commission for Culture and the Arts) tell us to perform the *bakle* and we contribute so much, we buy extra of everything to make the wine and to make the (rice) cakes.” Similarly, many assume that the event was revived for the sake of documentation and press, as community members recall cultural agencies, such as the National Commission for Culture and the Arts, coming and taking a great deal of photographs.

Some have also commented that it is not appropriate for Ambabag to revive the ritual since they no longer cultivate *tinawon*, and they perform two harvests a year. However, such comments were never discussed as a matter of authenticity, but rather a matter of sanctity. A specific variety of the *tinawon* required ritual since they were sacred; thus, rituals would be completely irrelevant to profane rice varieties. Though, as one elder commented, a *bakle* is a thanksgiving, and one should always celebrate and be thankful for the production of rice. Hence, if the purpose of the *bakle* is to show appreciation, then it should be irrelevant what rice is being appreciated. Therefore, in the varying views regarding the *bakle*, interestingly, people have approached the debate not just in pragmatic terms, but also with a rather theological bend, with people commenting on the nature of the ritual in connection to the planted rice.

In his study on the relationship between Christianity and modernity Keane explores the engagements between Dutch Calvinist missionaries, the Sumbanese converts and those who resisted conversion. Keane takes a semiotic approach in his

analysis of Christianisation through a focus on words, things and changing subjectivities. He adds to his semiotic approach a focus on materiality and temporality. Speaking about the materiality of objects and the frameworks that they both shape and are shaped by, Keane notes:

...things have repeatable forms that are a minimal condition of their recognizability across instances, of their circulation across social space, and of their capacity for temporal extension. But people's ability to recognize these forms as 'the same' depends on certain ways of framing them, since their materiality means they are always open to other unrealized possibilities (Keane, 2007: 21).

This insight is helpful in thinking about the potentiality and resilience of rice, in relation to Ifugao's changing relationship with rice cultivation within the context of Christianisation, rural development and heritage conservation.

As I elaborated upon in the chapter, the relationship between conservation and development has not just newly emerged in Ifugao. Rather, Ifugaos have long considered such tensions, as they negotiated social and natural resources to expand their capacities. Though as the repurposing of agricultural rituals reveal, revivals, no matter how popular and attended by locals, cannot be assumed "as a common interest shared by an undifferentiated mass" (Chau, 2006: 13). The disproportion of villages' adaptive capacities in relation to agricultural activities is not lost on the community members of the province.

As many farmers note, Ifugao province as a whole predominantly consists of rice farmers, but the recognition, support and often funding that such a description elicit are bestowed only to certain villages. As I have mentioned here and will discuss in later chapters, funding generated by the profits from the Ambangal Mini-hydro Plant is primarily invested for maintenance of irrigation sources and heritage conservation initiatives. Investments towards maintenance of the Ifugao Rice Terraces do not necessarily support investments towards infrastructure expected by community members. Ironically, heritage clusters that engender funds for conservation, as opposed to development, consist of villages that actually need improved infrastructure, especially in regards to electricity and roadways (see Chapter 5).

CHAPTER 4: OPEN FIELDS

As noted earlier, the impetus to construct a mini-hydro plant in Ifugao began with the idea of marrying conservation and development objectives in one project, by selling current generated by a hydroelectric plant, and investing part of the profit in a conservation fund. However, the Ambangal Mini-hydro Plant is not simply about the distribution of electricity or the generation of conservation funds (which was valued at 1,058,700PHP in 2011)¹. This chapter addresses in greater depth the Ambangal Mini-hydro Plant Project and its link to issues regarding the Ifugao's agricultural activities and the province's rural infrastructure. Besides concerns over agricultural activities, the initiative involved varying expectations over the distribution of electricity and job opportunities. In examining varying expectations over the project and the engagement that resulted from the realities which actually manifested, I also consider issues of well-being that go beyond concerns over agricultural fields.

The messy engagements involved in the implementation and maintenance of the Ambangal Mini-hydro Plant can be better grasped by addressing practices of consultation and deliberation in decision-making. Therefore, this chapter delves into issues of governance regarding the Ambangal Mini-hydro Plant and capacity-building practices that were tied to the project's implementation. Specifically, I examine the significant role of the National Commission of Indigenous Peoples in how impacted communities were consulted. I revisit consultation forums conducted for the mini-hydro project and describe management of the operating plant. I relate these consultations to previous discussion on kinship and local consultation practices. My aim is to consider capacity-building practices as elaborated upon and enacted in the implementation of the Ambangal Mini-hydro Plant Project. In light of the previous discussions regarding kinship relations and mobility, this chapter also clarifies what presuppositions lie beneath the identification of stakeholders.

In examining consultations and deliberations, I clarify how such practices are entangled in issues of trust and autonomy in decision-making. As I suggest, the issue of trust and autonomy concerns the adaptive capacities of people in re-

¹ Roughly 15,000GBP/24,000USD according to 2011 exchange rates

sponding to transformative socio-ecological issues. These issues are all the more salient, since what is at stake in the operation of the Ambangal Mini-hydro Plant are the following: management of natural resources, job opportunities and necessary infrastructure (electricity and irrigation systems). In focusing on the implementation of a mini-hydro plant and its impact on agricultural fields, this chapter focuses on the mobility of electric current, water and varying actors and their linked potentials. Elaborating upon how these flows are constituted in and shapes human engagements is necessary in scrutinizing the capacity-building practices embedded in an energy initiative deemed sustainable. More importantly, these connected flows illuminate community debates regarding challenges and developments in their access to socio-ecological resources.

In the case of development initiatives such as the mini-hydro plant, while neither interventions nor interpretations are predictable, this does not mean that they do not come with expectations. By delving into archival minutes of previous community consultations, I relate the concerns that arose from community consultations, to what actually transpired once the construction and operation of the plant commenced. What I aim to reveal are the varied trajectories of the communities' expectations and how they shaped further present deliberations over the plant's operation. Members of the community, along with the project sponsors, both expected the project to address electricity, prioritisation of agricultural resources and economic opportunities. Such stipulations were agreed upon and outlined in memorandum of agreements with each host community, and an overall memorandum of agreement for Ifugao Province. Among such conditions are: the compensation of land, job opportunities, the availability of water and the distribution of electricity. I point out how town forums transformed expectations into mutual obligations, since agreements had stipulations, not only for the project proponents, but also set conditions for the host communities.

Throughout the chapter, I consider the tensions entangled in the relationship between the stipulations set and how people reflect on, challenge and re-configure previous agreements. What is at stake in previous and ongoing negotiations over stipulations, is the energy potential of a mini-hydro plant, its potential to fund conservation efforts, the health of agricultural fields, along with the collective and individual opportunities expected from the plant's construction

and operation. Although I demarcate the different stages of the hydroelectric project in this chapter, I am by no means taking these stages as distinct and separate. Consultations, constructions and operations in relation to the mini-hydro plant constantly and concurrently occur, with one process informing the other.

The first two sections of the chapter focus on the consultations which occurred prior to the construction and operation of the Ambangal Mini-hydro Plant. Specifically, I examine the Free and Prior Informed Consent application undertaken for the project. I likewise address negotiations over properties for the building of the mini-hydro plant. The first two sections also detail deliberations over agreements related to the initiative, even after the mini-hydro plant began operating. I analyse such accounts with a discussion on trust and autonomy. In relation to the previous chapters, I also want to address here the role of kinship in ideas about stewardship that is implicated in negotiations over the construction of the Ambangal Mini-hydro Plant.

The last two sections concern the flows of water and current in relation to irrigation channels and the distribution of electricity generated by the mini-hydro plant. Like the first two sections, in focusing on the movement of water and current, I explore issues of trust and autonomy, especially as it relates to the management of the mini-hydro plant and community expectations. In focusing on issues of governance, I extend approaches to resilience which calls for a discussion on the role of institutions in adapting to and engaging with sudden and gradual transformations, complexities and uncertainties (Boyd and Folke, 2012: 3). One must keep in mind that, as Adger suggests, the “resilience of institutions is not simply a matter of the economic relations between them but is determined, as with social capital, by their inclusivity and degree of trust” (2000: 351).

PLANTING TRUST

In this section and the one that follows, I focus on the Free Prior and Informed Consent procedure, which was carried out for a feasibility study, and then once more before the construction of the Ambangal Mini-hydro Plant. I especially relate the deliberations amongst various actors even after the mini-hydro plant began operating. However, before beginning such discussions, I must

recount how the project came to be implemented, introduce the sponsoring parties and describe the scope of the mini-hydro initiative. The project was funded by e8, a multi-national organisation consisting of major electricity corporation, promoting sustainable energy projects. e8 has been rebranded as Global Sustainable Electricity Partnership in 2011, though throughout, I refer to the organisation as e8. On behalf of e8, the project was carried out by Tokyo Electric Services Company, an affiliate company of Tokyo Electric Power Company, an e8 member. The project was financed by Tokyo Electric Company for 1,000,000USD and implemented on the ground by Tokyo Electric Power Services Company. When speaking about the project, my interlocutors sometimes would say TEPSCO and sometimes TEPCO. When quoting my interlocutors, I leave it as they stated, but to keep consistency and to avoid having to constantly explain the relationship between the two companies, when it is my own statement, I refer to the project sponsors as TEPCO, because the company is listed as the sponsor in project documents.

The project scheme is as follows: the power generated by the mini-hydro plant will be sold directly to Ifugao Electric Cooperative Inc, and the net profit will be invested in a heritage conservation fund. The conservation fund must prioritise projects regarding the restoration and maintenance of terraces in the heritage clusters and rice-cultivation related projects within the designated host communities: Ambabag, Mungayang and Pindongan. Ifugao Electric Cooperative Inc is a non-profit, private entity owned by the consumers it serves. Yet, the cooperative is directly linked to the National Power Corporation, a government-owned and controlled energy provider. The manager of the Ifugao Electric Cooperative Inc is also approved by the National Electrification Administration, a government-owned corporation focused on rural electrification and managing electric cooperatives.

With the sale of energy to Ifugao Electric Cooperative Inc, the provincial government, which controls the mini-hydro plant, provides electricity to the regional grid, but are not tasked with distributing the energy generated. The project scheme includes a steering committee lead by the Provincial government, specifically, the Provincial Planning and Development Office working under the Governor's Office. Members of the Steering Committee consist of "representa-

tives from the provincial and local stakeholders, and the plant supervisor of the Ifugao-Ambangal Mini-hydro Power Plant” (e8, 2008: 24). Local stakeholders include provincial and municipal political actors, as well as village council members from the host-communities of Ambabag, Mungayang and Pindongan. However, as I addressed in previous chapters, due to people’s mobility, the matter of stakeholders is murky. Landowners whose land is to be impacted by the construction of the mini-hydro plant may not in fact reside in Ifugao, and thus, not greatly impacted by the projects implementation on an everyday basis. I return to this point further in this chapter, in regards to the purchase of private properties for the construction of the mini-hydro plant.

Before the project’s implementation in 2006, the Ifugao Office of the National Commission of Indigenous Peoples required an application for a Free and Prior Informed Consent. Under the Indigenous Peoples Rights Act, the Free and Prior Informed Consent was issued in 1998, and serves to protect indigenous communities from “inappropriate development” (Eder & McKenna, 2004: 67). This requirement must also be fulfilled by researchers. The Free and Prior Inform Consent provides protocols for gaining the consent of indigenous communities, to prevent the exploitation of natural resources in ancestral domains or coercion and manipulation of indigenous communities. The procedure gives “priority rights (not exclusive rights),” to indigenous communities.

Additionally, it supports and protects indigenous communities’ right to be consulted for the approval or rejection of projects that may impact their territories (Walpole & Annawi, 2011: 93). These include: large and small-scale projects, military, natural resource exploration, research, archaeological activities and government projects. An application involves the submission of documents related to proposed activities. Project sponsors must also fund all community forums and activities related to informing communities of a proposed project. The procedure, as they were when the Ambangal Mini-hydro Project was proposed, does not make exceptions regarding the identities of project proponents. Therefore, even indigenous community members are subject to such requirements (National Commission on Indigenous Peoples, 2006). Though such policies are commendable, they are not without shortcomings, as I address in this chapter. Prior to the enforcement of the procedure, consultations for a proposed similar

project in Hungduan and Asipulo were organised by Tokyo Electric Power Services Company and the Provincial and Municipal government.

While the Free and Prior Informed Consent became a hurdle for the hydroelectric project, the process actually established a relationship between the community and project sponsors. Lingering suspicions stirred by the myth of the Yamashita treasure, and Japan's occupation of the Philippines during World War II, resulted in awkward engagements between members of the proposed host communities and project proponents. Tokyo Electric Power Company personnel elicited suspicion from residents, particularly in Asipulo. Residents of Kiangnan harboured a similar distrust towards Japanese organisations. Many community members did in fact expressed their suspicion that Tokyo Electric Power Company was using the mini-hydro plant as a decoy for treasure hunting. As one community member noted, "First we thought they were looking for gold, because they had maps. When the *barangay*² captain (village head councilman) was with them, they would walk around with their maps, but they would not show him the maps."

Suspicion did not always characterise the relationship between the Japanese and community members of Kiangnan or Cordillera Region. Actually, prior to World War II, there was a thriving Japanese community in Baguio (Afable 2011). The settlement of Japanese migrants in Baguio was initiated by their involvement with the American government's experiment in linking Baguio and Benguet. In the early 1900s, the local Filipino and American population along with Japanese, Chinese and Australian migrants constructed the Benguet Road, now called Kennon Road, which connects Baguio³ to Benguet (Afable, 2011: 185-189). Migrants also had constant interactions with Ibaloi cultivators from Baguio, who adopted some agricultural techniques of the Japanese migrants. As Ileto reveals, rather than focus on their role on undermining and crushing the Philippine government during the Philippine-American War, the American colonial government featured themselves as liberators of Philippines from Spain. The colonial gov-

² For emphasis I leave certain words untranslated in interview quotes.

³ Baguio was established as a centre for American civil authorities administering the populations of Luzon's highland provinces. The city also became, and is still considered, the 'summer capital' of Philippines. During the period of America's colonial administration of Philippines, Baguio became a retreat for American colonial officials and Manila elites who wanted to escape the heat and overpopulation of the capital city.

ernment promoted this narrative during World War II, as Philippines faced occupation under Japan. When Japan invaded Philippines during World War II, Filipinos saw themselves as partners of the United States against the Japanese forces (Ileto, 2011: 40). Therefore, in the post-war period, while the wives and descendants of Americans were held in privilege status within their communities, the wives and children of the once thriving Japanese community in Baguio experienced anti-Japanese sentiments (Afable, 2011: 202).

The National Commission of Indigenous Peoples' facilitation of community forums abated the community's suspicion towards representatives of Tokyo Electric Power Company and established a connection between community members and the foreign project sponsors. Project sponsors also provided a sense of transparency by recruiting community members for the feasibility studies. Though as Strathern illuminates, the desire to make trust visible, actually points to the absence of trust (2000: 310). While the potential host communities shared initial reactions to the participating Japanese, people's retrospection regarding their reaction varies. One Pindongan resident recalled, "On their second surveying my husband was one of the drivers who drove them around to do the surveying, so that convinced me that they were really here for the plant." While Ambabag and Pindongan community members more likely expressed earlier suspicions with laughter, or sheepishness, Mungayang residents are more resolute about their initial scepticism, expressing current disappointments as the validation of earlier doubts.

I highlight the Free and Prior Informed Consent application process, because this protocol played a crucial role in the establishment and maintenance of trust for decision-making processes. As Engineer Buyuccan noted, the provincial (Ifugao) and local (Kiangnan) government along with Tokyo Electric Power Services Company, were required to conduct consultations to carry out a Free and Prior Informed Consent applications for the feasibility study and the actual plant construction. The feasibility study did not necessarily guarantee construction of the project; it simply allows the project proponents to evaluate whether constructing a mini-hydro plant would be possible in Kiangnan. In order to better understand the varying expectations related to the project, I re-examined the meeting minutes documenting the Free and Prior Informed Consent consultations

along with the Memorandum of Agreement. These documents are made available to the public and easily accessible by the National Commission of Indigenous Peoples. Some necessary documents were also held at the Provincial Planning and Development Office; these documents were more regulated and required more formal arrangements.

For a Free and Prior Informed Consent application, project proponents must come forward to indicate their intentions, and initiate the application process. This relies on an ideal honour-system, whereby people admit to an activity that requires the application and then undertake the requirements. As the Ifugao Province Director of the National Commission of Indigenous Peoples, Esther Nalliw-Licnachan, describes, “They (indigenous communities) don’t recognize that they have a right to be consulted, unless there’s a project that comes in.” I asked Nalliw-Licnachan, if this is the case, then how can protocols be enforced, particularly since one could easily commence a project without notifying the commission. Nalliw-Licnachan replied that the community’s involvement is essential, but this can only come if they understand that they have such rights. Ironically, as Nalliw-Licnachan remarked, sometimes it is only after an unjust incident that communities become aware of their rights. In other words, procedures to establish trust often arises from distrust.

However, there is no clear line between indigenous community members and project proponents, which puts the commission at the heart of negotiations, mediating between community members. The Free and Prior Informed Consent provides guidelines for how indigenous peoples can exercise their right to be consulted, especially in regards to the study and use of their resources. Though, as demonstrated in the previous chapter, community management of resources is not always unproblematic. Ifugao community members have also mentioned that having even indigenous peoples undergo the application process, establishes stipulations on their autonomy and capacity to manage resources. As one interlocutor remarked, “Why should you need somebody’s permission for me to give you my permission?” In order for people to trust the objectives and practices of the National Commission of Indigenous Peoples, the commission must show that their procedures are essential to protecting community members’ right to be consulted, while also assuring indigenous communities that procedures are

enacted soundly. Therefore, the commission is saddled with the expectations of communities they serve, and are not immune to being called into question.

With such expectations, consultation forums for the Free and Prior Informed Consent application are imbued with moral deliberations. As indicated in archival documents, the forums were often initiated with an ecumenical prayer (National Commission on Indigenous Peoples, 2008a; National Commission on Indigenous Peoples, 2008b; National Commission on Indigenous Peoples, 2008c). The content of the prayers are not detailed in meeting minutes. However, from the numerous public forums that I have attended in Ifugao, I observed a similar structure to the deployment of prayers in forums. Such prayers often ask the Holy Spirit to bless all attendees, and for spiritual guidance in the decisions and actions the attendees carry out. In longer forums which require a break for lunch, prayers are said once more to bless the food, so that it may nourish the attendees and contribute to their capacity to fulfil the task at hand. In consultations with international attendees, such prayers are often recited in English. For local forums, prayers are delivered in Tuwali with some English words. While seemingly just a formality, the prayers take on saliency when one considers that the matters addressed in these meetings concern the well-being of households and communities.

In a previous chapter regarding people's deployment of prayers during times of agricultural hardships, I noted that prayers depoliticise the dependencies and consequences which arose from the introduction of high-yielding rice varieties. However, with the reciting of prayers in forums, concerns which are brought up are taken as issues regarding moral values. Attendees of the meeting are made aware of the moral decisions involved in approving or disapproving the project. The calling forth of moral values becomes acutely potent in relation to what is at stake in development projects: fair compensation of lands, environmental protection and the delivery of provisions to affected communities. When recalling the issues addressed in the consultation, community members often describe aspects of the memorandum of agreement as a duty or obligation, in the same way that the project sponsors maintain that community members also had a responsibility to fulfil for the implementation of the project. Prayers not only magnify the importance of decisions made by community members,

they sanctify procedures of decision-making, giving gravity to what results from these activities. As facilitators of forums, the National Commission of Indigenous Peoples was indelibly linked to the expectations held by the project sponsors and community members alike.

In her essay on the role of prayers in revolts, de la Cruz notes that prayers “mediate the formation of collectivities and convert worship into will” (2012: 168). De la Cruz approaches the role of prayers in revolts as “a practice and action,” as opposed to expressions of ideas (2012: 169). The word *will*, which de la Cruz uses, is rather salient, in that it denotes self-determination. When prayers are invoked, it is not that people are relying on divine powers to force them into action; actually, in the link between the practice of praying and consultation, the implication is that participants are free to act independently. Thus, in the process of decision making and the enactment of what has been decided, people are not coerced, but rather entrusted to exercise their autonomy. However, that exercise of autonomy can equally be accompanied with support or betrayal.

My own application brought to life the ambience of the mini-hydroelectric project consultations that are not captured in meeting archives, since it involved the very host communities of the project, thus recruiting once more some of the people who were previously consulted. Each forum I conducted was facilitated and documented by a staff of the National Commission of the Indigenous Peoples. A field officer for the commission, who is also a member of the Kiangnan community, was tasked with attending my community forums. The experience revealed how the application process, while serving to assess the merits of project, actually becomes the very subject of people’s reflection on what they expected from the project and what actually occurred upon its implementation.

Interestingly, the field officer who accompanied me in focus groups and individual interviews was the same staff member involved in the consultations for the Ambangal Mini-hydro Plant Project, which occurred three years prior to my research. Initially, I had some reservations on how the presence of a commission staff would impact the way community members receive my own research proposal. Though, I was not the only one with trepidations about conducting the town forums, since the field officer was just as anxious about how community members might react to her presence. Particularly, before organising a consulta-

tion in the barangay hall (community centre) of Mungayang, I was advised to emphasize my role as an independent researcher. This would reassure community members that I was not in any way involved in the mini-hydroelectric project. As staff recalled, it was especially challenging to organise consultations for the Mungayang community, as people were not as readily willing to participate in consultations. The community's hesitation to participate in the project is also made evident on their divisive approval of the project, in which nine representatives voted to approve the project, while six disapproved (National Commission on Indigenous Peoples, 2008a). Even, in e8's more positive results of public acceptability, which was concluded from their own public surveys⁴, 86% of Mungayang residents were said to have approved the project compared to 96% of residents from Ambabag and Pindongan (Tokyo Electric Power Company, 2008b: xi).

In their commitment to organising public forums, the commission was seen as acting on behalf of the project proponents, as opposed to an independent mediator. As it happened, during my own consultation, in which I presented my research to Mungayang residents, a few community members actually began to express their complaints to the field officer, and the field officer had to remind community members that the National Commission of Indigenous Peoples was an objective party. The field officer advised Mungayang residents to document their complaints in writing, or make an official complaint to the commission office in Lagawe. Such a procedure was seen by some community members as too cumbersome, and as added responsibilities for village councilmembers. Some attendees questioned why the commission cannot themselves, draft the grievance letter. While Mungayang community members were quick to associate the commission with the project, the actual project sponsors actually saw the commission as actively encouraging community members to demand more during the consultations for the initiative, and thus stalling negotiations. Engineer Buyuccan remarked that, "Even when they knew the demands were irrational, NCIP (National Commission of Indigenous Peoples) took the side of the people. We were expecting them to be neutral, to be objective, so that if the demands were too irrational that they would help us explain."

⁴ Conducted prior to the second round of Free and Prior Informed Consent consultations

As commission personnel, one is at once employed by the state, but is also task with protecting indigenous communities from exploitive projects that may be backed by the state. Complicating matters is the fact that project proponents were themselves part of the Ifugao community. Commission personnel have commented that they must not involve their own bias to influence people's decisions. Additionally the commission cannot be seen as having implanted particular sentiments or responses in the opinions of community members. In Alejo's ethnography regarding a geothermal power plant in Mindanao, Philippines, he reflected on his own involvement in town forums, noting that non-intervention is not necessarily neutral. As Alejo points out, not interfering can actually enliven a particular position (2000: 136). Though intending to be neutral, the actions of the commission staff are never taken as such, particularly when even their inaction is seen by community members as indicative of a position.

Before I left Kiangnan, the Free and Prior Informed Consent was suspended and all applications were put on hold, so that the guidelines can be reviewed and revised. The procedure was revised in 2002, 2006 and more recently in 2012. In 1998, the mining sector, particularly The Chamber of Mines, deemed the procedure anti-development (Castro, 2000: 42). With pressure from mining companies, the purpose of the Free and Prior Informed Consent was undermined when the National Commission of Indigenous Peoples issued the Administrative Order No. 3. The administrative order confirmed that, "firms with approved contracts, licenses, agreements, and other concessions," prior to the implementation of the Indigenous Peoples' Rights Act, were excused from the Free and Prior Informed Consent requirement (Castro, 2000: 42). In 2012, the revised Free and Prior Informed Consent guidelines were once again brought into question by the Mines and Geosciences Bureau. The Bureau pointed to the fact that the processes for evaluating mining projects, as indicated in the new guidelines, contradicted the guidelines established by the Mines and Geosciences Bureau (Umali, 2012).

In their evaluation of the consent procedure (in its 2006 version), Walpole and Annawi have pointed out that the process is not iterative. Instead, the procedure signals a 'one-off' decision making method, and consultations are repeated only to reconsider projects initially deemed negative (Walpole & Annawi, 2011: 105). Furthermore, the Free and Prior Informed Consent has been criti-

cised for not having a system of providing alternative information. Due to the objectivity of the National Commission on Indigenous Peoples, community members are not actually getting alternative viewpoints regarding a project. Rather, communities receive information only as presented by project proponents (Minter, et al., 2012). While such critiques are warranted, they do not account for the ongoing engagements community members undertake with implemented development projects, even after it has been approved. In the case of the Ambangal Mini-hydro Plant, community members' positionalities are ambiguous and informal negotiations are ongoing and carried out through the everyday interactions amongst diverse actors, as I show in this chapter.

In fact, commission personnel are not disconnected from the concerns of their own communities, and may in fact share such concerns. Issues regarding the project were openly discussed amongst community members, sometimes in humour and other times with people very clearly expressing their frustration, as I recount further in the chapter. Likewise, in the Ifugao institution of the *munkalun*, local consultation and mediation practices are still undertaken. With individual boundary disputes that the National Commission on Indigenous Peoples handle, the contending parties will bring along *monkalun* who have detailed knowledge of the boundary in question and who guide the vying parties to reach a settlement. As Nalliw-Licnahan explains:

Munkalun these days are still part of the settlements of boundary disputes, although as members or part of the group of elders called for the purpose. It is very unfortunate that in the Ambangal MHPP, there were no *munkaluns* who were part of the negotiation process.

While elders were identified as stakeholders, in the case of consulting with communities, the forums for the Ambangal Mini-hydro Plant Project were arranged predominantly through the barangay council (village council, smallest elected government).

Although the consultations were enacted to assess the mini-hydroelectric initiative, in many ways, the project enlivened discussion and reflection for the very procedure that evaluated the merit of the proposed project. An understanding of the consultations which occurred for the project concurrently reveals the varying perspectives regarding the Free and Prior Informed Consent, and the

process by which negotiations were mediated. Discrepancies over and within this process persisted even after, and because of, the plant's operation. Alongside people's contemplation of the Free and Prior Informed Consent and the procedures involved in its enactment, community members reflect on how the National Commission of Indigenous Peoples sees themselves in relation to the communities they serve. This is particularly true of the staff members who are at once community members of Ifugao and personnel of the National Commission of Indigenous Peoples. Trust in this case, creates, "its own preconditions of existence, which must in turn, be certified as trustworthy" (Jiménez, 2011: 193). In the next section I especially explore the implications matters regarding trust and autonomy as they relate to negotiations over land needed for the construction of the small-scale hydropower plant.

SITES OF NEGOTIATIONS

Surrounded by rice fields, along gravel roads, the Ambangal Mini-hydro Plant is located in Pindongan, a village in Kiangan, Ifugao. Approaching the road, one sees a large *bale*⁵ adjacent to a tiny bungalow the size of a shed. The bungalow, a concrete structure, functions as the office of the six plant operators and the plant supervisor, who periodically visits the site. The *bale* on the other hand, is a wooden hut with a thatched roof, this serves as accommodation for the operators, since the plant operates for 24-hours, with six operators each serving an 8-hour shift in pairs. When approaching the mini-hydro plant from the front, aside from a few transmission lines and signage, there is not much evidence that the site is a power plant. When approaching Ambangal Mini-hydro Plant from Bahawit, Lagawe, one can see the actual powerhouse which contains the turbine. Though even then, the view is not a clear indication that amidst the rice fields is indeed a mini-hydroelectric plant (Photo 4.1). However, after descending a set of stairs and entering the powerhouse, one is confronted with the sheer volume of the whirring noise emitted by the turbine (Photo 4.2).

⁵ Generally means house or home, though it is also the word which specifically refers to houses constructed using Ifugao architectural techniques



Photo 4.1: Ambangal Mini-hydro Plant



Photo 4.2: The turbine and control panel of the Ambangal Mini-hydro Plant

Structures which support the plant consists of: the head tank, which contains the water to be pumped to the turbine; the penstock, which pumps water to the turbine; the spillway, a channel that catches excess water; the head race, a 1.6 kilometre channel that directs the diverted water to the powerhouse; the settling basin, where water is held so that sediments are captured prior to the water passing through the 1.6 kilometre headrace; and the intake weir, which diverts river water onto the headrace (Photo 4.3). Since it is a requirement that the plant cannot interrupt agricultural irrigation systems, existing irrigation channels were used as spillways, so that during the rainy season, excess water can be diverted to the rice fields and during the dry season, when use of the turbine is limited, the flow of water not being utilised by the plant can once again be diverted. The distance between the powerhouse and the intake-weir is about two kilometres. It is only by undergoing a hike that one can see the structures which allow for the operation of the system.



Photo 4. 3: Ambangal Mini-hydro Plant civil structures
(Clockwise: head tank; penstock; spillway; headrace; settling basin; intake weir)

One of the conditions set forth in the implementation of the Ambangal Mini-hydro Plant is that its construction will not necessitate the excavation of rice terraces, as this would be detrimental to the livelihood of farmers. This was an agreed upon condition by both the concerned host communities and the provincial government. In fact, approval of the plant's construction depended on its size as a small-scale alternative energy plant. Communities in the Cordillera region are wary of large-scale dam projects, particularly in light of their experience with the failed Chico Dam Project.⁶ Small-scale hydroelectric power is defined by the amount of energy the turbine can generate, often referred to as capacity. As the supervisor of the Ambangal Mini-hydro Plant explained, a mini-hydro plant has the capacity to generate 1,000 kilowatts at most. Once the capacity of a turbine exceeds 1,000 kilowatts, it can no longer be labelled 'mini'. Smaller than a mini-hydro plant are micro-hydro systems, which must generate less than 100 kilowatt, and pico-hydro systems, which must generate less than 5 kilowatts. The

⁶ In the 1970s, fears of displacement, flooding and destruction of rice fields, resulted in hostile resistance from indigenous communities in Kalinga, over the building of a dam in the province. In response to these protests, the Marcos administration increased militarisation of the Cordillera Administrative Region, inciting sporadic violence lasting until the 1980s.

Ambangal Mini-hydro Plant generates 200 kilowatts, hence the label mini.

Due to the challenges that project sponsors experienced with community members in Hungduan, once the project was transferred to Kiangnan, proponents were even more cautious about the size and impact of the project. There was great consideration on avoiding construction on rice fields. Nevertheless, the construction of the 1.6 kilometre-long headrace, penstock, spillway and head tank still required the utilization of private lands, though mainly private forests were impacted. In meeting minutes and the Memorandum of Agreement, the conditions of these property sales were discussed. One Ambabag resident was particularly concerned with his property, and as recorded in meeting minutes, this particular stakeholder was “against the project for the reason that his property and the environment would be damaged by the onset of the project” (National Commission on Indigenous Peoples, 2008b).

Members of the host communities were very much concerned about the impact of a mini-hydropower plant on agricultural properties. As expressed by an Ambabag resident:

First, the community wasn't too happy with the Ambangal project, because of how it might affect the rice fields, that maybe it will stop the water from coming (referring to irrigation). Also, people weren't keen on the trees being cut. So us *kagawad* (village council members), we really weren't sure we wanted this to push through.

What quelled such doubts is the project sponsor's engagement with property owners, in which separate consultations were organised for negotiations on the monetary compensation for impacted lands. However, such negotiations were with owners, who sometimes actually did not reside in the host communities, but rather in Poblacion, or other towns within or outside Ifugao Province.

As an Ambabag resident expressed, “They didn't call for us, they really only called those whose land may be damaged, those who owned land.” In the consultation meeting minutes of Mungayang, some individuals present at the meeting did not actually vote, for the reason that they are ‘caretakers or representatives,’ and thus do not consider themselves the rightful stakeholders (National Commission on Indigenous Peoples, 2008a). However, tenant farmers are more likely to be implicated in matters concerning agricultural fields, than the actual owners. While the public consultations were meant to involve community mem-

bers in decision making, who actually participated, or was encouraged to participate, does not necessarily represent the varied concerns of diverse actors. Therefore, consensus achieved in consultations hides exclusion, oppositions and deliberations (Callon, et al., 2009: 4).

The negotiations for compensating property owners proved to be challenging. As recalled by Engineer Buyuccan:

We had to establish how much per square metre, we had to negotiate with the landowners, we had to do the surveying and we had to count the trees...We had to decide together, with NCIP (National Commission of Indigenous Peoples) and with the community, for the prices. So for this type of tree it will be this much, and for this type this much. Suddenly people were fighting, saying 'that's my tree,' fighting about boundaries. People started fighting about who owns this and who owns that.

Because some of the lands were owned by families and shared amongst siblings, relatives had to settle who would be deemed the owner on paper. Property negotiations also had to address the worth of natural resources and the standardisation of prices, ensuring fairness among the community members. Standardisation presented a problem, since not all trees are created equal, and mature trees along with certain types of trees are deemed more valuable. For instance, a coffee tree was priced at 100 pesos (National Commission on Indigenous Peoples, 2008b) and mature gemelina trees were priced at 500 pesos (National Commission on Indigenous Peoples, 2008c).

Besides the compensation for trees, individuals also asked for the compensation of wildlings (National Commission on Indigenous Peoples, 2008b). The settlement of property claims was complicated by the fact that in Ifugao, the sale and transfer of trees do not require the transfer of land, a practice that even Barton observed in his account of Ifugao Law (1919: 41). Community members, project proponents and National Commission of Indigenous Peoples personnel alike, readily reveal that certain individuals demanded more compensation and made more claims than the average request of their peers. A staff member of the Provincial Planning and Development Office also stated that once the prices were negotiated, they had to ensure that all parties involved understood the transfer of land ownership and, "once it's (land) purchased there would be no further problems."

Despite such negotiations, the compensation for properties did not signal a closure on issues regarding the construction of structures which support the plant's operation. Community members in Mungayang remarked that during construction of the headrace, their irrigation was disrupted. As such, farmers only conducted one-cropping during the agricultural year, instead of their usual two-cropping schedule. Some farmers did admit to being compensated for their loss of harvest. Though, as one farmer expressed, the interruption on farming activities actually impacted the subsequent planting season since, "because the terraces were abandoned for one cropping, for the next cropping, there was more work, there was more vegetation to clear, which meant we also had less rice." Similarly, some farmers actually claimed that they were never compensated for the decrease in their harvest.

On the part of the project proponents, they stated that they were prepared to give further compensations for the affected properties during construction, and did in fact set aside funds to do so, should this occur. Specifically for the village of Mungayang, according to meeting minutes, it was established that there will be, "Compensation for those who cannot cultivate land during the construction of the project for the reason that water going to the field is cut off" (National Commission on Indigenous Peoples, 2008a). However, project proponents felt that certain members of the community took the construction stage of the project as an opportunity to demand compensation for abandoned terraces. As farmers explained to me, in times when water is lacking, farmers will not endeavour a second cropping, but this does not mean a field has been completely abandoned. In this case, there were discrepancies between a merely fallow field and a completely abandoned one.

The scenarios the project proponents and the farmers expressed are both highly possible. Indeed, economic opportunities outside of Ifugao, irreparable damages to rice fields and irrigation sources caused by landslides, along with inadequate funds are amongst the reasons which compel households to abandon rice fields. At the same time, Ifugaos are just as likely to leave fields fallow, depending on their capacity to invest on cultivating the field. The practice of leaving fields fallow is not uncommon or new, and has been pointed out in Conklin's earlier, seminal ethnography regarding Ifugao land use (1974). As I have noted in

the previous chapter, the practice of abandoning fields does not necessarily equal to dispossession. In fact, the longer life-cycle of a landform may include a cultivated field reverting back to a previous fallow state or being overtaken by vegetation.

Being Ifugaos themselves, some of the project proponents recognised the complexities of land use in Ifugao, but at the same time also understood the current dynamics affecting this practice. As such, one cannot judge contrasting claims as lies since the issue of the claims, in this case land, is equivocally defined. When compensation for land was set as a stipulation, *land* in this case was ambiguous. To the proponents land to be compensated was defined as cultivated land. For community members, the distinction between abandoned and cultivated fields was blurry. Such sites of negotiations emerged only when compensations were distributed and actors with varying positions were compelled to re-evaluate their previous agreement.

This incongruity in people's description of a particular agricultural field reveals how ambiguities provided validation for the varying responses to the mini-hydro plant construction. In setting aside funds for affected farmers during construction, the project proponents established a protocol, whereby farmers who can claim to be inconvenienced by the plant construction, can be compensated for their predicament. Though it was expected that only those who were truly affected would come forward, the established process of compensation opened the door for individuals to increase their claims over benefits. Therefore, descriptions of land constitute a particular action, whether it is the request for compensation, if land is described as fallow or denial of compensation when land is said to be abandoned.

While the project proponents endeavoured to maintain their relations with the affected farmers through reparations, what actually resulted was that some community members questioned the procedures enacted for compensating property owners. In the same manner, project proponents also questioned the motivations of certain community members who they deemed were acting unfairly. In the process of acquiring people's trust in the design of the Ambangal Mini-hydro Plant, what arose were new concerns that needed to be addressed, particularly in the way land is classified and the benefit that is attached to this

classification. In their actions and reactions, impacted communities test how they can repurpose interventions. Here, the act of establishing trust is not exclusive to developers and implementers of a particular project. The aforementioned engagements between project sponsors and stakeholders illuminate the reciprocal nature of trust and the way in which actors who rely on each other, mutually have expectations for each other.

Even the selection of the operators trusted with operating and maintaining the plant presented a challenge to the maintenance of trust regarding the fulfilment of stipulations. To begin with, although agreements stipulated that the mini-hydro plant operators must be from the host communities, because hiring required examinations and evaluations, the stipulation could not be fully met. Such audits were established for ensuring that the most suitable candidates would be chosen to operate the mini-hydro plant. As such, one host community was not represented amongst the six operators hired, resulting in speculation from members of the community not represented. Some saw this as evidence of the hiring process being fixed, even though hiring procedures were set, precisely to ensure objectivity. The consequence of that objectivity however is the unfulfilled stipulation that the hired operators must be from each of the host communities. In fact, the six operators underwent trainings to even be selected for the position, and after being selected, further trainings were carried out.

Despite the expectations constituted in the act of trust, such a relationship rests on the understanding that the other party can always exercise their own volition (Ingold, 2000: 70). However, the link between free will and trust result in unequal relationships. When trust is breached, the redress is unequal. For project proponents, this can mean denying community members compensation. Similarly, the choices of project proponents implicate job opportunities and agricultural activities of community members. While for affected community members, only the vocalization of complaints is their main response. Though, the residents' disappointments can be stored and later raised in future engagements with initiatives, thereby shaping the procedures that may be involved in such negotiations and more firmly exercising their autonomy to refuse or resist projects.

In this sense, inequities are constituted in the unpredictability of responses that incite further action and negotiation for the maintenance of trust. What is

implied in the relationship of trust is shared accountability. In her critique of capacity-building, Eade notes that this approach in development is based on 'solidarity-based partnerships' that must necessarily entail mutual accountability, shared responsibilities, dialogue and flexibility (2007: 637). While these dynamics may have transpired amongst the various stake-holders, its occurrence was laden with inequities. In the next section, I explore how the flows of water and current unveiled these inequities and elicited deliberations, mediated this time by the operators entrusted with operating and maintaining the mini-hydro plant.

MAINTAINING CHANNELS

In operating the hydro plant, operators must prevent flooding, ensure no disruption in agricultural irrigation, and distribute electricity. The tasks that the operators have been entrusted with serve to establish the community's trust in the plant and its operation. The operators field questions from their fellow community members, which demonstrate that maintaining the hydro plant also involves managing expectations. The operators' maintenance of channels is not just regarding concrete water channels, but also in maintaining the communicative channels necessary for an engagement with the uncertainties and expectations that the hydro plant comes with. Maintaining channels also refers to pathways towards people's well-being, particularly since the very channels that provide electricity, a very significant amenity, is likewise the channel that provides water to rice-fields. In their positions, operators are provided with an economic opportunity that expands their capacity to ensure their well-being and the well-being of their kin. Ironically, as I later recount, it is this same opportunity that present a challenge to the operators' own well-being, since the maintenance of channels include precarious tasks.

As I have discussed in Chapter 3, the importance of water and irrigation systems in Kiangnan, and rice cultivation in general, cannot be overstated. Since the Ambangal Mini-hydro Plant utilises water sources, and is located in an agricultural community predominantly cultivating irrigated rice fields, there was great anxiety over how irrigation sources would be impacted. Central to the operation of the Ambangal Mini-hydro Plant is the climate of its location, which can dictate the entire operation of the Ambangal Mini-hydro Plant, since it is through

weather that generates the water required in the operation of the turbine engines. For some farmers the worry was that farming would be compromised by the newly introduced project. The accommodation of farming schedules and the appeasement of people's anxiety over a possible shortage of water supply was always at the forefront of discussions.

Community members were particularly concerned with how the use of water would be regulated to accommodate the wet and dry seasons. Though irrigation was a salient issue to all three communities, there were differences in their level of concern. In Ambabag, some farmers, who plant in a higher elevation, closer to water sources in Mount Kapugan, have mentioned that the lack of water supply is not a major concern. Of all three host communities, the most anxious about their irrigation in relation to the mini-hydropower plant was the village of Mungayang. Even residents in the other host communities, recognised why Mungayang needed more coaxing to approve the project. As one Pindongan councilmember related, "There were many in Mungayang who were against it, but here we had no problem, it's because of their irrigation, because they have a harder time with getting water." These concerns were placated by the prioritisation of field irrigation over the mini-hydro plant's operation, in which, electricity production will be reduced during dry months to prioritise the water needed for irrigation (e8, 2012: 27).

Proponents were conscientious about the importance of water as a natural resource to Ifugaos. Likewise, residents of Ifugao expressed that water was their greatest resource. As many expressed, the topography of the province prevents large machinery and extensive building, which are necessary for the establishment of commercial centres. Many Ifugao residents have claimed that they cannot have 'factories' and 'malls', but at least they have water. As indicated by project documents, the capacity of water to contribute to community development was an objective, whereby, "it became evident that development of the abundant water resources must be linked to regional economic vitalization and to conservation projects" (e8, 2010: 21).

While project proponents highlighted the cultural importance of water as a 'life force', one should be reminded as I have in Chapter 2 and 3, the various significance and use of water as both a nurturing, but sometimes, disruptive and

destructive force. Additionally, in development plans that identify water resources as potential sources for rural vitalization, water is transformed into a measurable, numerical entity, whereby numbers “are themselves generative of particular worldviews” (Hastrup, 2013: 61). The abstraction of water into something measureable simplifies complexities involved in human engagements with water. As Strang asserts, water is not simply an ecological or technical problem, above all it involves socio-political issues (2009: 5).

As I have discussed in other chapters of this thesis, water configures particular social forms “possible or prohibitive” (Hastrup: 2013: 60). In its connection to the flow of electric currents, water blurs the boundary between nature and infrastructure (ibid). To recognise the potential of water is to shed light on the various possibilities and dynamics that for better or worse, emerges from the mutability of water. In these last two sections, I particularly focus on the flows of water and electric current, and how their entanglement configures social relations and processes. A focus on the flows of water and electric current allows for a better understanding of community dialogue over the project’s stipulations.

In their edited volume, *Development Brokers and Translators: the Ethnography of Aid and Agencies*, Lewis and Mosse highlight that in the carrying out of development projects, actors “reconstruct the network of interactions through the creation of coherent representations” (2006: 15). In project documents, Tokyo Electric Power Company employed a narrative highlighting the importance of water in Ifugao culture. As articulated by project proponents, “the project is a concrete example of the use of hydropower for development, it resonates with ancestral Ifugao practices that revere water” (e8, 2010: 26). To validate their accommodation of Ifugao ecological relations, the project proponents recruited the support of Manuel Dulawan, an Ifugao elder, regarded as a “historian and noted authority on Ifugao culture” (ibid). However, people’s engagement with water in Ifugao, is not simply as a natural resource. Specifically, in this section I detail weather conditions and how this shapes the landscape in ways that emerges in particular sociospatial relations.

The climate of Kiangnan asserted its sway on the mini-hydro plant’s operation, since it is through weather that generates the water required to power the turbines. Issues over water were not simply ensuring the availability of water for

irrigation and plant operation, but likewise the impact of torrential rain on both farmers and operators. Regarding the inaugural operation of Ambangal Mini-hydro Plant, Engineer Carmelita Buyuccan, of the Provincial and Planning Development Office, recounts:

We were so excited to start, but there was no rain, because of El Niño, and at the first rain we were so excited to start operating, but the rain was so strong it ruined part of the structures, so we couldn't operate, we had to wait two months before operating...and it wasn't even a typhoon, it was just strong rain.

Even during construction of the water channels, the climate and topography of Kiangang presented challenges.

The typhoon which hit Kiangang in 2009 also caused slides at the construction site. As recalled by a staff from the Provincial Planning and Development Office, the damages caused by the typhoon during construction created an unsafe environment for wage labourers. As she recounted, "There was one time when a worker was hit with a stone, and of course Tokyo Electric Power Company was afraid, they didn't want that to happen again." She further noted, "We had to follow international standards, like the workers should be wearing helmets, gloves and boots, and they need a safety officer. So we had to hire for that...we found somebody from here who used to work for a mining company." The labourers hired for the construction of the plant, along with the six operators eventually selected for overseeing its operation, were at the frontline of engaging with these natural elements; particularly so, for the six operators, whose daily tasks include conducting the civil patrol.

Once selected, one of the daily tasks performed by the plant's six operators is the civil patrol. During my first visit, I accompanied one of the operators on his civil patrol, which involved navigating the 1.6 kilometre headrace, passing through the various civil structures of the mini-hydro plant. Along this hike, operators must observe and clean the plant's civil structures, documenting and collecting any debris or trash that may impact the flow of the water or the operation of the turbine. It is during this task where operators control the flow of the water to the turbine via the opening and closing of the intake and flush gate valves. Such gates are opened or closed to regulate and direct the flow of water and to prevent the collection of sediment along the structures. As previously discussed,

among the stipulations set forth on the memorandum of agreement for the hydroelectric power, is that all plant personnel must be from Kiangnan. Although this was a stipulation from community members, it must be noted that the spatial relationship between the mini-hydro plant personnel and the Kiangnan topography is essential to the effectiveness of the system. Even if this was not a stipulation, the implementers of the plant would have realised the practicality of such a requirement.

While previous discussions in this chapter have focused primarily on human actors, I now shift my attention to the civil structures and the landscape, for which water plays a central role in shaping. As I assert in this chapter, the materiality of the landscape and the civil structures are inextricable to the interactions and relationships in the plant's operation. In fact, an engagement with precipitation and how rain impacts the water levels and current of the river characterises the operators' experience of operating and maintaining the mini-hydro plant. It is the mutability of water that likewise figures in community members' response regarding the distribution of electricity in relation to the energy initiative.

To prevent flooding and for the proper maintenance of the turbine engine, a specific range of water volume is allowed to flow through the channel. Though measured, water here is not treated abstractly. In fact, regulating and measuring the volume of water requires the operators to engage with the landscape in a very specific way. During heavy rain, an intake gate has to be closed, and operators adjust the necessary stop logs along the weir to regulate the water flow. I paid a visit to the plant two weeks after Typhoon Pedring landed in Kiangnan, and sure enough, the plant personnel confirmed that they had to oversee the plant even during a typhoon, actually, especially during a typhoon. One of the operators expressed this task as an obligation, in which he remarked, "During flash floods, even at night time, even at midnight, one o'clock, we must have to go to control the water level, that's our job, we'll carry a flashlight and a *bolo* (machete) to cut the trees and just go." This claim was not expressed as an exaggeration, but rather, a nonchalant description of the operators' tasks.

As the operators informed me, early on the day the typhoon was expected to hit Ifugao, they were able to make necessary adjustments to the civil

structures before the heavy rains commenced. In the typhoon's aftermath, there were mudslides along sections of the headrace, along with uprooted trees and vegetation falling onto structures. The impact of weather on their daily tasks is not lost on the operators. Some of them have voiced that the most challenging aspect of the job is traversing the headrace, despite the fact that it is the aspect of their tasks that they are most familiar with. As one operator describes, "The headrace is very long and some parts have slopes that are very steep, so there are some areas where things can fall down, especially during the rainy season, with the erosion."

From the powerhouse to the weir, one usually walks on the top of the concrete edges of the headrace, which are embedded on the ground. This was not an issue in areas where the headrace was levelled with the ground, on gentle slopes. On such cases, one does not need to walk on the edges of the channel; one can instead, walk along the sides, on sometimes leafy, muddy or gravel pathways. However, the contours of the banks along the Ambangal brook have some steep slopes. It is in the steep areas where one no longer has the security of a levelled surface. Instead, in steeper areas, the edges of the headrace are flanked by either a narrow strip of grounded surface or a drop into vegetated grounds. Thus, one usually walks towards the side of the channel flanked with a grounded natural surface.

If one were to lose their balance on this path, ideally, one would lean towards the channel so that one at least falls into the less than one metre-deep channel, instead of falling into a two-three metre drop leading to a solid ground or a bed of underbrush. In very steep areas, with little or no grounded pathways, the channel is covered with wooden boards, and one can walk on these wooden boards (Photo 4. 4). Though traversing the headrace is relatively safe, operators do not ignore the fact that certain situations (particularly weather-related) make the endeavour perilous.



Photo 4.4: Headraces for the Ambangal Mini-hydro Plant

The six operators, who undertake the hike daily, have a personal knowledge of the landscape's contours. As some operators mentioned, in their youth, they navigated the trails, forests and rivers that now serve as the location of civil structures for the plant. However, the newly constructed infrastructure connected to the Ambangal Mini-hydro Plant created unfamiliar surfaces, compelling the operators to adjust the knowledge they possess of navigating the landscape. Newly built structures change the built environment that one must move through, but this is not just a case of moving through space, but rather moving on the surfaces of spaces in a way that is "inextricably caught up in the very process of thinking and knowing" (Ingold, 2010: 135).

Hence, just as knowing how to read the powerhouse control panel and maintaining the turbine are crucial in the operation of the power plant, so too is the act of walking. The act of walking is part-and-parcel of the procedures that allows for the operation and maintenance of the mini-hydro plant. When the control panel signals that the generated energy capacity is low, this signals that the water level is too low for the plant to operate, or that there is debris disrupting the passage of water through the headrace, which would require the operators to navigate the headrace to evaluate such situations. Likewise, for the turbine to properly function, this requires the proper operation of the settling basin and head tank to assure that sediments do not interfere with the operation of the turbine. Such a procedure is carried out spatially.

Besides ensuring the proper operation of the plant, operators also become a channel for communication. Via the operators, farmers communicate their on-going experiences with the civil structures. For instance, one household member whose garden flanked one side of a channel, called attention to the fact that sometimes water overflowing from the channel is sprayed all over his gar-

den. Similarly, it is the operators who can call attention to chickens falling into headraces and drowning in the water and to buffalos that are being grazed on grounds over wires, which could cause damages to the buried wires. These interactions, along with concern for safer routes along the headrace, result in continuing amendments to the civil structures, for instance: covering certain sections of the channels with cement or wooden boards, and fencing in certain parcels of grassland.

While I have previously discussed that trust between human actors involves acknowledgement of autonomy, it has to be also noted that this implicit condition exists as well for the relationship between human and non-human actors. The materiality of Ifugao's topography as well as the civil structures crucial to the plant's operation constantly present challenges to the operators. Similarly, since the plant's ability to provide supplementary electricity during a power outage relies on coordination with the Ifugao Electric Cooperative, the mini-hydro plant itself is at times not able to serve as an alternative source of electricity. As I have demonstrated, the technology rely on the operators to properly carry out their task, otherwise, the life-span of the turbine can be compromised. Certainly, operators, by not properly carrying out tasks can indeed breach the relationship of trust that exists between the plant and the controllers. However as I have noted earlier, trust while being reciprocal, is not equal. While there is no redress for the challenges presented by the civil structures, except for the fact that structures can be amended, there are definite consequences for the operators for not properly carrying out the procedure of operation.

Since operators are employed by the implementers of the project, and residents of the host communities, they become the de facto recipient of inquiries from community members. This is especially the case regarding power outages and power distribution. In their daily overseeing of the civil structures, operators also become witnesses to inappropriate activities transpiring within the landscape, thus being in a position to alert community members and the provincial government, and to vouch for the residents' own observations. As one Ambabag resident related, "The owner of the private land which is very near the plant are blasting the stones because they're looking for gold. People want them to stop because they can block the water flow, and can impact the working of the hydro-

plant.” It is with plant operators that those who are concerned can corroborate the verity of their claims.

Additionally, stones are sometimes set aside along riverbanks, and such stones are utilised for retaining walls that prevent landslides. Plant personnel usually monitor these stones in passing as they conduct their civil patrol. During a hike, the plant supervisor and I passed by children who were collecting stones along the river. Upon seeing this, the plant supervisor called out to the young boys, and warned them to avoid the stones that have already been set aside for use on a future civil structure.

The operators are also fully aware that the headrace transects a landscape that is multipurpose. The plant’s headrace provides viable pathways to Uttu Falls, a favourite summer destination for local residents. While on a hike with the plant supervisor, he expressed the idea that the plant should be developed as an educational tourist site. Students from Ifugao State University are in fact, taken on field trips to the mini-hydro plant as part of their curriculum. The areas around the weir and intake basin also provide recreational spots for wading during hot summer days. Similarly, since residents have access to streams, springs and channels, people commonly wash clothes along irrigation sources. Ifugao customary laws account for rights to water sources and irrigation ditches, particularly in relation to the irrigation of rice fields. As I pointed out in Chapter 3, irrigation is more an issue of rights and access rather than ownership.

In focusing on the flow of water and how it is generative of social and material relations, I must underscore that community members’ engagement with water is characterised by a perennial concern for extreme precipitation or lack thereof. In his analysis of weather and walking as it relates to surfaces, Ingold considers how rain, light and moisture create surfaces (2010: 126). However, Ingold’s account of weather is rosy, whereby nature is nurturing. As I mentioned previously, the unpredictable flows and levels of water is precisely a point of consideration for a community that depends on it not just for agriculture in this case, but as a supplement electric energy source. In fact, what figures highly in Ifugao is that while changing levels and flows of water are seasonal, climate change has converted these cyclical phenomena into disasters so that the movements of water is “unusual in timing or severity” (Lebel et al., 2009: 127). In the

next section, I address how water, linked with the flow of electric currents, reveals inequities and challenges in people's access to resources and opportunities.

DYNAMIC CURRENTS

The increase in precipitation the year I resided in Kiangang, impacted the availability of electricity throughout the province. Torrential rain is not uncommon or unexpected. However, people have commented that the severity of rain has in fact gotten stronger (even outside the typhoon season). Some residents attribute this to climate change, explicitly using the English word for the phenomenon. Power outages in Kiangang are also not rare, though the frequency that they occurred during that particular year was seen as more than previous years. The power outages that plagued us that summer were often both scheduled and spontaneous, and which worsened in the ensuing typhoon season. Scheduled power outages were due to maintenance work, while spontaneous power outages were the result of strong rain and winds which damaged transmission lines. Scheduled power outages usually lasted for at least 8 hours, starting from eight in the morning until five in the afternoon. On the other hand, the duration of power outages caused by weather conditions is always unpredictable.

When maintenance work on the national or provincial grid are scheduled, people would often speculate as to when in the week a particular municipality would be impacted with a power outage. As such, the town hummed with speculation as to when and how long a power outage would occur. Early in the morning, people listened to the morning local radio news to hear of the announcement. Speculation continued throughout the early evening, with people texting messages with each other to confirm which *sitio* had power, and whether this signals that the return of power is imminent to the other nearby *sitio*. When electricity returns to the town, this does not occur instantaneously; instead, light slowly trickles in and depends on the location of the distribution lines connected to houses in a particular block, neighbourhood or village.

In my own neighbourhood, there have been many occasions when the houses behind ours were electrified, sometimes minutes or hours before our own household was literally out of the dark. However, during a particularly strong typhoon, which I will later discuss, the inconsistency of settling power

outages was magnified, when certain Kiangnan households were kept in the dark several days longer than other households. This variability, of when and where electricity is distributed to, during and following a power outage, is a crucial issue in the implementation of the Ambangal Mini-hydro Plant. Community members with children were particularly frustrated by extended power outages, especially in regards to children's eyesight and efficiency in completing assignments.

Interestingly, my understanding of Kiangnan's power distribution was enriched by my encounters in public transportations on regular trips between Kiangnan and Lagawe. To travel between these two municipalities I regularly took either a Jeepney or a tricycle (Photo 4.5). Among the topics of conversation that sometimes emerged during my commute from Kiangnan to Lagawe is the issue of power outages. On several occasions when I have commuted, my friends, *manang* Doreen or *manang* Marilyn, would complain about a power outage to another passenger. Usually, the complaint was collective, with the other passengers joining our chorus of complaints. Though occasionally, some community members expressed being spared the frustration of a power outage. These community members were often from the Baguinge and Ibulao area.



Photo 4.5 Public transportation
Left to right: A Jeepney and tricycles

From reading project documents and speaking with the Ambangal Mini-hydro Plant supervisor and the Ifugao Electric Cooperative director, I had knowledge of the technical description that indicated which distribution lines would be well connected to the plant. According to a feasibility study report,

there were two considered interconnections for existing distribution lines, the Pindongan route or the Baguinge route, for which the Baguinge route was considered the most efficient, since it traverses a shorter distance, requires less electric poles, is less likely to be impacted by inclement weather, and is less costly (Tokyo Electric Power Company, 2008a: 63). According to the engineer who supervises the Ambangal Mini-hydro Plant and the engineer who heads the Ifugao Electric Cooperative, in the event of a power outage, an isolated connection of lines to the plant can be administered, giving power to certain communities with direct connection to the plant. Due to the layout of the distribution lines in Kiangnan, the village that receives this isolated power service is lower Baguinge, a village bordering Lagawe.

From my knowledge of the project design, it did not surprise me to hear that Baguinge (specifically lower Baguinge) was sometimes spared power outages. Similarly, members of the Kiangnan community, sometimes from the village of Ambabag and Pindongan would also ask me the rhetorical question, “Do you know who’s getting electricity?” Such a question was meant to provoke rather than inquire. In this case, their question towards me was a means for community members to express their dissatisfaction over Baguinge’s incidental advantage over their own unfulfilled expectations. Despite possessing the information regarding the plant’s distribution of power, I initially overlooked the significance of this aspect in the plant’s design. In fact, it was not until power outages worsened during the rainy season, in which I realised the implication of this design in relation to the host communities. Power outages demonstrated what the design was accomplishing. On the one hand, the Ambangal Mini-hydro Plant contributed to reducing the range of area affected by power outages, its other impact is that it allowed people to question the distribution of electricity in a way that implicates issues regarding Ifugao’s infrastructure, mainly that of electricity and roads.

During the typhoon season of that year, torrential rains for several days caused soil erosion leading to landslides, and strong winds uprooted trees, both of which resulted in felled power lines all over the province (Photo 4.6). This left many households in Ifugao Province without electricity for more than two weeks. Shortly after a regular supply of electricity returned to the entire village of Poblacion, where I resided, I returned to the village of Mungayang to meet

with members of the council. At the time, the barangay council was conducting their monthly meeting, and with a friend from the National Commission on Indigenous Peoples, I waited for their meeting to conclude. As we waited, we spoke with Mungayang community members lingering in the village hall. When the conversation veered towards the subject of the typhoon, as they normally did during that fraught month, we were informed that the village of Mungayang was in fact, still waiting for the return of their power supply.



Photo 4. 6: Aftermath of Typhoon Pedring and Quiel

Clockwise: a loose boulder; soil erosion; bent utility pole; collapsed bridge – days following the aftermath of Typhoon Pedring and Quiel

Understandably, community members were frustrated from the weeks of not having electricity. It must be for this reason that in my conversations with Mungayang residents after the typhoon, when they were prompted to speak about the hydroelectric project, community members focused much of their disappointment on the lack of electrification in Mungayang. It was clear that the plant was not meeting the community members' hopes that its operation will improve village electrification. As one Mungayang resident remarked, "It was

said that there will be current, but when it began operating, it produced only little current.” Another community member even questioned the very existence of the mini-hydro plant particularly in relation to the extreme weather, remarking:

When there’s no water they turn it off, when there’s too much water they turn it off, if they’re turning it off, then the workers are a waste, then why do we need them...all the more, when it’s raining everything will be ruined anyway.

It was expected that the benefit of electrification from the plant could have contributed to improving the non-agricultural, economic activities of Mungayang residents. Mungayang residents are renowned for producing quality *bolos* (machete), which are transported to Lagawe and sold in the market. As one community member notes, “We have livelihood projects in Nabunlan, (a *sitio* in Mungayang). People there are blacksmiths by trade, but during typhoons when there is no electricity we can’t work, because some of our tools need power, but look, until now we still don’t have power.” In this way, inadequate electricity is seen as an impediment to a supplementary livelihood activity that provides an additional avenue to ensuring well-being.

However, it was not simply Mungayang residents who expressed disappointment over electrification despite the Ambangal Mini-hydro Plant’s operation. Even before the prolonged power outage caused by the typhoon, Pindongan and Ambabag members were critical about the fact that current generated by the mini-hydro was not directly routed to the three host communities. Residents often spoke about such electrification as an obligation, a stipulation set forth on the memorandum of agreement that has not been upheld. A community member in Pindongan admitted regret over approving the project claiming, “I was one of the signatories, but now I got some regrets in signing, because they have not valued some of the agreements, for example the electrification of our *barangay*.” On behalf of the project implementers, Provincial Planning and Development Office personnel has commented that the project was meant to be a demonstration of how alternative-energy technology can work for the region, and not as a direct source for electrification for the three host communities. Project documents indicate that project implementers often indicated that they were devoted to addressing Kiangán’s electrification needs (Tokyo Electric Power Company,

2008a). However, as regional authorities maintain, they expressed that this would be done through the supply of electricity via the centralised grid and not by the donated hydro plant.

I demonstrate these varying sides which explain the inconsistent distribution of power in Kiangnan, not to illuminate or defend a particular argument and position. Instead, I detail them to demonstrate the indelible link between uncertainties and expectations constituted in processes of establishing and maintaining trust as people negotiate unequal capacities. To begin with, the layout of the distribution lines resulted from a feasibility study which accounted for how the climate and topography interacts with the mini-hydroelectric plant. However, while this layout fortuitously distributed power to Baguinge, it created disappointment in some community members from the host communities of Ambabag, Mungayang and Pindongan. Such unmet expectations brought into question a consent procedure that was in the first place, meant to evaluate the merit of the small-scale initiative. Interestingly, the concern for this layout emerged due to the uncertainties of weather, in which torrential rain throughout the year, and two destructive typhoons, created frustrations regarding extraordinary periods of power outages.

Yet, despite such disappointments, the conditions which have challenged the construction and operation of the Ambangal Mini-hydro Plant have ironically fostered encouraging sentiments from various actors. Proponents for the projects are quite vocal in how difficult it was to realise the project; however, the hurdles encountered for the project is often expressed as a driving force to pursuing it. There was a sense of obligation to see the project through, despite natural forces and tense negotiations with host communities. For the host communities, disappointments for unmet expectations sit alongside an enchantment with the mini-hydro plant. Kiangnan residents commonly boast about the quality of the 'Japanese'⁷ technology or speak about the distinction of the project in the region. This distinction will be discussed in the next chapter, which addresses a similar project in Hungduan that was never realised, unlike the Ambangal Mini-hydro Plant. Though I must point out that what characterised the implementation of the Ambangal Mini-hydro Plant in Kiangnan is how the project is continually deliber-

⁷ Quality is often associated with Japanese-made products

ated. As argued by Harwell, when resolution becomes a goal, a fragile consensus might be affirmed, even if it does not exist (2011: 210). Thus, such ongoing debates and contestations should be explicitly featured and brought to the light, especially for the purpose of addressing issues of accountability and access.

CHAPTER 5: LOCATION MATTERS

In this chapter, I specifically examine a previously proposed small-scale hydropower initiative for Hapao, Hungduan, which never came into being. The fact that the project was not realised is significant especially in contrast to the eventual construction and operation of the Ambangal Mini-hydro Plant in Kiangnan, and the presence of small-scale hydro turbines in other villages of Hungduan. In addressing the unrealised mini-hydropower scheme for Hapao, Hungduan, I discuss the community members' engagement with inadequate electricity, in relation to concerns over the impact of the proposed project on agricultural fields. Similarly, this chapter addresses the rather short paper trail left from the unrealised small-scale hydropower proposal. Interestingly, the briefness of public consultations connected to the initiative, along with the project's fruitlessness and the lacking documentation of the proposed plan, is what resonates with the varying actors involved in the initiative's brief life in Hungduan.

Hence, this chapter concerns the need to address the spatiotemporal issues associated with the implementation of projects deemed sustainable. I especially contemplate the relationship between absence and presence as a process of becoming in regards to the existence of other small-scale hydroelectric equipment scattered throughout Hungduan. Thus, it is in this chapter where I further discuss potentiality in regards to non-effects or the limiting and altogether avoidance of effects and activities in sustainable development. A key principle in sustainable development is the avoidance of lasting effects that would compromise environments and future generations' access and management of natural resources.

Understanding the dynamic between short-term and long term expectations and possibilities require us to deal equally with what is 'there' and 'not there'. It is in examining these expectations and varying visualisation of the Ifugao Rice Terraces that I present local critiques on the zoning of heritage clusters. Local critiques on the management of heritage clusters in relation to people's aspirations for the development of their municipality, highlights an important dilemma in practices of sustainable development, that is: whose expectations and standards of sustainability

should be met? What happens when practices deemed sustainable do not necessarily align with the objectives of conservation efforts?

A crucial issue in the dissimilar aftermath of the undeveloped mini-hydro plant proposal in Hapao, Hungduan and the completion of a mini-hydro plant in Kiangnan is the zoning of heritage clusters. UNESCO has identified five distinct sites as heritage clusters. These sites are dispersed across the municipalities of Banaue, Hungduan, Kiangnan and Mayoyao. In the next chapter, I more robustly discuss the zoning of such heritage clusters, though here, I must clarify what is implicated in the delineation of zones. The demarcation of heritage clusters into core and buffer zones guides how rural development is regulated. Core zones, the actual heritage clusters, are prioritised in conservation efforts, so that rural development is highly regulated. Buffer zones consist of villages where rural development can be more negotiated.

Since the entire municipality of Hungduan is considered a heritage cluster, the presence of structures in the municipality is more intensely monitored and regulated, a condition felt by its residents. With its heritage cluster contained in a demarcated village, Kiangnan is more able to host development projects in villages outside their heritage cluster. Implicated actors involved in the proposed mini-hydro schemes in both Hungduan and Kiangnan either bemoan the lack of effects (the denial of necessary infrastructure) or worry precisely about the proliferation of possible effects (unintended structural impact on agricultural fields). Such concerns are both tied to an issue regarding the proposed location of a mini-hydro plant, and the inscribed location of a heritage cluster.

What is at stake in the inconsistencies in zoning practices are necessary infrastructure entangled in the people's pursuit of well-being. The containment of development zones and the protection of areas to be conserved relates to the distribution of electricity, access to transport and communication networks and available funding related to heritage efforts. Community members see such amenities as avenues to short and long-term opportunities. The differentiation between core-zones and areas that do not garner the attention of heritage interventions compels a consideration of space as capacity. This notion of space as capacity has been suggested by Jimenez and his thoughts on the mutual becoming of people and places. In his

discussion of how community members construct urban spaces in Antofagasta, Chile, Jimenez highlights that “Space is a showcase for practices that seek recreation and entertainment, healthfulness and safety. It is therefore a dimension and form of agency – a capacity” (2003: 138). By thinking of space as a capacity, the potential of what the space can become is tied to the potential subjectivities and relationships that can emerge from a place. I consider this point further in the chapter, especially in regards to people’s concern over the future of the province and the future generation of Ifugaos. Spaces do not simply index certain activities and social processes, nor do they just objectify particular relationships. Rather, spaces allow for such relations and processes to transpire because these dynamics are spatial and “allows for a degree of flexibility in its process of structuration” (Jimenez, 2003: 148).

Following on the work of authors who have attempted to present an anthropological approach to absence (Bille, et al., 2010), I highlight that in understanding potentiality, it is just as necessary to analyse the absence of objects, and it is through such absences that actors and zones of engagements reveal themselves. I am guided by discussions on the concept of absence, especially as they relate to Agamben’s elaboration of potentiality as *potential* and *potential not to*. A focus on the unrealised mini-hydro plant project in Hungduan allows for a consideration of plasticity and modification regarding the fraught relationship between conservation and development initiatives.

Though I engage with discussions on absence, I do not aim to provide a robust philosophical discussion on absences or negation. Rather, I take a cue from such ideas in order to re-evaluate the concept of potentiality, and to flesh out its political aspect. For as I mentioned in the introduction of this thesis, potentialities are not neutral; they come with expectations and aspirations, and are laden with stakes. This chapter serves to feature the politics of potentiality, as I detail the apprehensions and expectations regarding a proposed mini-hydro plant in Hungduan. The aim is to expound on the dynamics transpiring as people deliberate how transformations in their community may serve to expand opportunities and services available. In doing so, one can better draw out the unequal distribution of resilience, whereby “greater resilience for one group affects the resilience of others in both

positive and negative ways" (Leach, 2008: 11).

In speaking of the unrealised mini-hydro plant in Hapao and the eventual operating one in Kiangan, I approach the relationship between presence and absence as "the becoming and begoing of effects" (Bhaskar, 2008: 50), wherein "the emphasis on absence, linking change to the past, present and future, means that being is always a matter of change in the process of becoming" (Norie, 2010: 30). In Hungduan, this notion of absence constitutes memories and expectations inextricable to a mini-hydroelectric initiative which involved an expectation for the absence of environmental impact. Yet, by speaking of memories and expectations, I do not mean to reduce absence to meaning, symbols and ideas.

In his call to seriously consider the saliency of absence, Fowles suggests that "absence gain a kind of independence from the perceiving human subject. Absences push back and resist. They prompt us into action" (2010: 28). Fowles adds that absence is beyond signification, and can actually mould "the process of signification" (ibid). This chapter deals precisely with various engagements for which absences were not only part of, but also shaped. Here, I elaborate on the absence of electricity and the desire for little or no environmental impact in relation to small-scale hydroelectric projects. Similarly, I examine how deficient project reports and disrupted channels of communication brought to the foreground a project that never came to be. Particularly, I underscore how the engagements that emerged in the unrealised project in Hungduan, not only shaped the process of how a similar initiative was implemented in Kiangan, but likewise, prompted the pursuit of it.

In *Being and Nothingness*, Sartre's eminent interrogation on the nature of negations, he describes the act of entering a café expecting to meet a friend, Pierre, who is actually not present in the café. As Sartre highlights, what is absent transforms one's experience of what is present (Sartre, 1958: 9-10). Drawing from Sartre's philosophical discussion, in Bille's contribution to an anthropological analysis of absence, he notes that presence and absence do not rely on the absolute "positive occurrence or the absence lack of such," rather, they "reside in the way the experience of phenomena differs from expectations and preconceptions" (Bille, 2010: 5). While I discuss absence in relation to presence, I do not assume that the two should

be conflated, since absence is salient on its own. However, rather than treating absence and presence as opposing conditions, I suggest instead that absence and presence presuppose each other.

As Derrida elaborates upon in his concept of 'trace', the present is shaped and defined by what is absent. According to Derrida, the trace:

...does not let itself be summed up in the simplicity of a present...On the other hand, if the trace refers to an absolute past, it is because it obliges us to think a past that can no longer be understood in the form of a modified presence (Derrida, 1976: 66).

Therefore, rather than seeing absence and presence as distinct, static and absolute states, it may be useful to instead see them as transitory and dynamic conditions which inform each other. From Derrida's concept of trace, potentiality can be grasped as transient and changing, so that even at the moment a possibility is realised, alternative possibilities are on the verge of becoming. The situation in Hapao, Hungduan I detail here considers how people respond to changing, temporal conditions and what is necessary in such a process. This process of decision making is political involving a plurality of actors. As I address in this chapter, the containment of heritage zones implicated not only people's ability to engage with changes, but more importantly their ability to autonomously decide on how to do so. As I suggest, the capacity of people and places are joint; thus, the limiting of people's capacity is reflective of restrictions emerging from conservation interventions.

As this chapter concerns the development of small-scale hydroelectric projects across time and space, the ethnographic account is presented to reflect my movement between Kiangnan and Hungduan at particular times and does not unfold in a linear timescale. The first section addresses various small-scale energy projects carried out in Ifuago, which promoted sustainable energy use. I particularly relate such projects within the context of Ifugao conceptualisation and practice of sustainability, especially regarding stewardship and heritage. Following that, I detail my fortuitous discovery of micro and pico-hydropower equipment in Maggok, Hungduan and their significance considering the isolation of the village and its lack of adequate electricity and road networks. The last section of the chapter is where I detail

a proposed mini-hydro plant project in Hungduan that was not realised.

A PLAN

In 1992, the Philippine Rural Reconstruction Movement began to integrate renewable energy into their programs. The Philippine Rural Reconstruction Movement is a Philippine-based NGO focused on rural development, which opened a chapter in Ifugao in 1988. As I detailed in Chapter 3, the organisation established the Save the Ifugao Terraces Movement, prior to phasing out their operations of its Ifugao chapter in 2000. In the early 90s, The Philippine Rural Reconstruction Movement's focus on renewable energy would be covered under the organisation's Sustainable Rural District Development Program. According to the organisation, this focus emerged from the fact that:

...sustainable energy development ran through the different themes that were covered, such as sustainable agriculture, alternative trading and marketing and social infrastructure building. These entailed questions such as whether the presence of microhydro would encourage men to stay in the village instead of seasonally migrating to the lowlands, thereby helping to produce stronger organizational communities; whether alternative trading and marketing could be developed with the use of renewable, decentralized sources of energy instead of having to rely on centralized sources; and if it would be better to promote solar powered pumps for irrigation practices instead of diesel water pumps (Floors, 2008: 114-115).

Addressing these concerns motivated the organisation's attempts to implement alternative energy projects such as small-scale hydropower initiatives. This section discusses the trajectory of small-scale hydroelectric projects in Ifugao, with focus on the proposed Hapao mini-hydro plant that was halted in its development and never came to be.

During the active years of Philippine Rural Reconstruction Movement in Ifugao, Esther Nalliw-Licnahan, now director of Ifugao's National Commission of Indigenous Peoples, was a staff of the NGO. She recounted that the NGO's foray into small-scale hydro development was serendipitous, and arose from the organisa-

tion's relationship with international volunteers. As she recalled:

We had this Dutch guy who was a VSO (Volunteers Services Overseas)¹ volunteer, and he was into micro hydro. We had a micro hydro in Cambulo. It started with a micro-hydro where you have to bring your cell-volt battery to the plant and then you charge it. Then we had...a *dragonfly*, and then we had the *firefly*.

As detailed in a project report for the initiative, descriptions of turbines dispersed by the Philippine Rural Reconstruction Movement are as follows:

The Dragonfly is a scaled up version of the Firefly. A similar design of crossflow turbine is used but with a runner of approximately 300 mm diameter... The two earliest Dragonfly systems were used to provide mechanical power, for coffee and rice milling (Ashden, 2009: 2).

The Firefly is the smallest system with a rated output of 100 W. It has a crossflow turbine with a runner of approximately 75 mm diameter, coupled to a vehicle alternator...Firefly systems charge batteries to run home lighting systems and radios" (ibid).

Despite the involvement of foreign organisations, Nalliw-Licnahan is quick to highlight that a community member was already experimenting with alternative energy sources even before the presence of these volunteers.

Louis Cabbigat from Hungduan was given the moniker 'Barefoot Engineer' for having developed a micro hydro system called The Butterfly. The Butterfly system is a turbine which is a hybrid of an axial pump and a Francis turbine. It has an output of 3 kW of electrical power, generated at 220V AC and supplying power via a mini grid to 28 households (Ashden, 2008: 2). Cabbigat's and the Volunteer Services Overseas' interest in hydroelectric systems, developed into a collaborative relationship between foreign volunteers and local community members. As Nalliw-Licnahan recalled, "Incidentally, he (Cabbigat) met Simon² and they clicked together, so they worked together." As such, the organisation began to implement micro-hydro initiatives.

The NGO staff designated to undertake micro-hydro initiatives was Jovel, an Ifugao from the municipal of Hungduan, who, at the time of my residence in

¹ "VSO is the world's leading independent international development organisation that works through volunteers to fight poverty in developing countries" (Volunteer Service Overseas, 2010).

² Another volunteer from the Volunteer Services Overseas organisation.

Kiangan, was also conducting his own doctoral research in the province. Jovel coordinated the implementation of micro-hydro plants in three municipalities within Hungduan, one was completed, but is no longer running, and two were never realised. All three had the same scheme, in which the Philippine Rural Reconstruction Movement provides the capital for necessary equipment, train local technicians and then organise the communities into an electric cooperative. Members of the cooperative would then pay monthly dues for the maintenance of the micro-hydro plant and compensation for the technicians. Currently, before it became out-of-order, this was the scheme followed for the management of the micro-hydro plant in Maggok. Jovel mentioned that throughout the community consultations, people were still sceptical about the installation of such equipment within the environment.

As Jovel recalled:

People were saying maybe it will pollute the environment, and destroy the environment. We had to explain this is a micro-project; it's a small project, we had to let them know it's not destructive.

Jovel also had to convince community members of the NGO's larger objective in relation to the plant, which was to create sustainable energy sources. I asked several community members if there was a Tuwali word that meant 'sustainable', which did not produce a direct translation. Rather, community members often described to me practices which they deemed sustainable because such practices underscores management that does not compromise the needs of future generations. Interestingly, when speaking about initiatives related to conservation or resource management, community organisers refer to the *muyong* (private forests) as a means of discussing the responsible management of natural resources. The word *boltan* (heirloom) conjures the notion of heritage or conservation, in that *boltan* are ancestral heirlooms bestowed to descendants entrusted with the care of these inheritances. *Tawid*, which refers to inherited property, also conjures the concept of stewardship. As I discussed in previous chapters, stewardship implicates the departed, since the care of such resources are necessary for fulfilling obligations towards one's ancestors. In the Ifugao concept of stewardship, ancestors are involved in decisions regarding resource management. Thus, sustainability in regards to the caring of resources in-

volves Ifugaos across generations, not just present and future ones.

As was generally expressed by community members, sustainability was a lived experience rather than an idea, as one of my interlocutors declared, “There is no word for that, because we just do it. That is how we live.” However, community organisers have used this ‘buzzword’, particularly in introducing projects, or submitting proposals for funding bodies. Though, as one community organiser declared, “I have biases against the word sustainability, it’s not really a local concept...and all the communities get so tired of these words [referring to project buzzwords like, ‘green’ and ‘sustainable/sustainability’ or even ‘gender’]. It is an outside word, we don’t really absorb it, for us, it’s superficial.” As Cornwall suggests in her reflective interrogation of what ‘buzzwords’ do, she notes:

Different words, different contexts, different actors, and different struggles call for different strategies...development’s language is far more than a matter of playing games with words. These reflections on the language of development evoke bigger questions about the world-making projects that development’s buzzwords define and describe (2007: 482)

In fact, what the reference to *muyong* prompts is the way in which the capacity of a space and of non-humans (particularly rice) are tied to the capacity of people (see also Chapter 1 and 3). As I note in Chapter 3, this cannot be seen always as harmonious, since the investments and labour needed to maintain or expand such capacities can be both challenging and advantageous. In fact, what has been a long-standing concern in Ifugao is the mutuality between the plasticity and modification of agricultural fields and the subjectivities and relationships of the people who dwell in them. Viewed in this way, this challenge to reconcile conservation and development can be seen not as an issue which came about due to the heritage status of the Ifugao Rice Terraces, but one that Ifugao communities continually grapple with as people consider short-term and long-term aspirations in a dynamic environment.

In promotion of small-scale alternative energy initiatives, such projects are promoted within the framework of ‘sustainable development’ and are made to encapsulate the notion of responsible management. These initiatives must at once consider services for the well-being of community members, while ensuring that

plans are amenable to the protection and conservation of natural resources. Such initiatives aim at making challenges as a means to further expand the opportunities and resources available to people. In this case, the state's neglect over the distribution of electricity is transformed into potential avenues for new partnerships and paradigms for infrastructural development. Projects that encourage communities to tend to themselves reflect neoliberal principles that shift responsibilities to communities in order to compensate for a 'leaner' government (Stone, 2013: 116). Though, as I detail in the chapter, such initiatives may also serve as a way to incite action from regional authorities.

While NGOs have previously led the way in Ifugao for hydroelectric initiatives, the turning point for the provincial and municipal government's engagement with alternative energy emerged from the need to address heritage conservation efforts for the Ifugao Rice Terraces, due to its inscription in the World Heritage in Danger List. According to the Provincial Planning and Development Coordinator, Engineer Buyuccan, during this time, they drafted project proposals and letters and circulated them to potential funding bodies, strategically customising their proposals to the particular priorities and preoccupation of the sought-after agencies. In 2003, the provincial government organised a forum for investors, to acquire financial support for conservation matters or the development of enterprises that relate to conservation goals.

As Engineer Buyuccan related, the provincial government's venture into a more robust hydroelectric power project is as follows:

In the late 90s, maybe 98 or 99, we were always being visited by the DOE (Department of Energy), because I think our water has the potential for a micro and mini-hydro. Together with DOE we were always hosting Japanese [representatives], like from universities and even from TEPSCO (Tokyo Electric Power Services Company).

Serendipitously, in 2003, during the investment forum at Banaue Hotel, an investor, the Japanese Bank for International Cooperation, showed interest in developing a mini-hydro plant in the province. As the engineer recounts, "Somehow, the Japanese funders and DOE became interested, and they said we can develop a mini-hydro

plant.” A Provincial and Planning Development Office staff recalls the undertaking of the study, “There was a special project with JBIC (Japanese Bank for International Cooperation)...JBIC was tapped to do a feasibility study on hydropower development, and I was one of the staff who was assigned to accompany the study. We went as far as Hapao (Hungduan), Kiangnan and Asipulo.”

The study was conducted with the objective of developing:

...unused hydropower resources...expected to be effective in raising local funds by improved energy supply to the region (promotion of electrification, lowering of the power rate, and forest conservation by switching the home energy from firewood to electricity) and sale of surplus electricity to the outside world (Japan Consulting Institute, 2003: S-1).

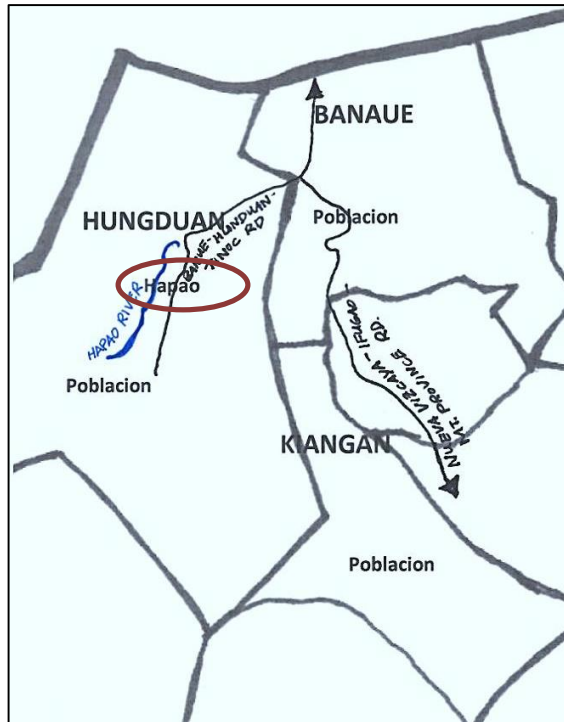
Though the study was referred to as a feasibility study, according to a staff member, it was not as robust as the usual procedure, and in fact, was more similar to an exploratory report, in which, “it was really a survey; they identified so many potential sites (for hydropower).” From the potential sites identified, Hapao was considered among the top five. According to the study report, the criteria established for determining the potential sites were, “easy access, close to existing transmission and distribution lines and little impact on terraced paddy fields and other natural, cultural heritage” (Japan Consulting Institute, 2003: 3-2).

Hapao, Hungduan and Bokiawan, Kiangnan were singled out as the two selected sites, “in consideration of the scale of sites and access conditions” (4-9). However, the designs for both sites would have resulted in the modification of rice paddies (ibid). Though both sites were considered, I only focus on the proposal for Hapao, Hungduan, since it is Hungduan which is designated as one of the heritage clusters in the Ifugao Rice Terraces. In Hapao, the construction of the mini-hydropower plant necessitated the excavation of agricultural fields since, “paddy fields are located along both banks of the intake point, the riverbed water intake method will be adopted...After water intake water will flow through a tunnel...The terrace at the planned power plant will be excavated to ensure the maximum head” (4-9).

As a volunteer for Save the Ifugao Terraces Movement, a local NGO, I often travelled with the organisation in their offered EcoTours excursions, participated in

the UNESCO Monitoring Mission (see Chapter 6) or engaged in community events. On one occasion, in March 2011, as the organisation hosted a group of academics from a university in Japan, I travelled with tour guides to accompany the academics to Hungduan. Particularly, we were to visit a youth programme in Hungduan that operate under by Save the Ifugao Terraces Movement. During this early visit to Hungduan, fortuitously, I had a chance to speak with the municipal mayor. Upon discovering that I was doing research on the Ambangal Mini-hydro Plant, he mentioned that the project was actually initially proposed for Hapao, Hungduan. At the time, the mayor was hastily departing for another commitment; therefore, I could not pursue the issue further. However, the topic surfaced from conversations with other Hungduan community members, even those not residing in Ifugao, but who still knew of the subject matter.

As a result of that visit, I became more interested in pursuing not only how a mini-hydroelectric power plant *came into being* in Kiangnan, but also how it *never came into being* in Hapao. As a result, I made periodical trips to Hungduan from March 2011 to April 2012 to better grasp the situation that the mayor recounted. The village of Hapao lies along the Hapao River, and along a major highway that also passes through Banaue. Since Hungduan's town centre is located at the end of a main road, the more accessible Hapao has come to be more like a town centre, than the actual town centre (Map 5.1). Its location also enjoys a close proximity to stores, touristic landmarks and serves as a mid-way mark between the town centres of Banaue and Hungduan. From the main road to Hapao, one must traverse an easy, half-hour hike through rice fields. This route is especially well connected to viewing decks for Hungduan's heritage cluster, where one can see a panoramic view of rice terraces, with Mount Kapugan looming in the background and Hapao River bisecting the valley (Photo 5.1).



Map 5.1: Hapao in relation to Poblacion, Banaue and Poblacion, Hungduan

An indication of Hapao's vicinity to the road, along with its near equidistance between the town centres (Poblacion) of Banaue and Hungduan



Photo 5.1: A view of the Hapao Rice Terraces

(Photo by: Atan Martin, 2011)

According to Hapao residents, sometime in 2003³, a consultation was organised for the project implementers to present the results of their study report. As one

³ The year for the actual consultation is ambiguous; some recall 2003, though others note 2004. The hydropower project matter was however, concretely addressed in a 2004 meeting minutes from the Municipal Board (Office of the Sangguniang Bayan, 2004: 5-6).

resident remarked, “The people here had a fear of tunnelling through that portion (regarding tunnelling through rice fields). They thought that maybe the water will leak from the tunnel.” Thus, there were worries that the construction of a mini-hydro plant would simultaneously add a structure on the field, whilst reducing the area of productive rice fields. Hence, the owner of the field to be excavated was not willing to sell his land. When asked how their concerns were addressed, residents replied by saying that there was never a response either from the local government, or the Japanese representatives who had attended the previous community consultation. As they recalled, there was one consultation that occurred in 2003. In my conversations with community members, their recollections regarding the project were rather fragmentary. As one resident recollected, “They put a measuring gauge in the area, for which they come and monitor. They put it by the river, but we never knew when they came to check. It seems they just go straight to the municipal office to coordinate all these things.” As expressed by residents, they were not fully aware of the activities preceding the consultation in 2003, nor were they aware of what resulted and followed from that sole consultation.

In her interpretation of the circumstance that unfolded in Hapao, Rowena, who manages Hungduan’s Tourism Office, related:

There was failure of communication. It was abruptly disrupted. There was going to be this project, and suddenly it was called destructive. Had there been a follow-up consultation, they (community members) may have understood it better. Because even the local officials, they didn’t have an inkling of the study, it wasn’t presented that way. They just gathered people to talk about the plant, but the technicality of it wasn’t properly discussed. So it didn’t agree with people’s sensibilities. Then it died suddenly, and then there were no more talks, it was dead and buried.

The residents’ fragmented experience with the project proposal mirrored my own experience discovering and examining its unravelling. Even accessing documents related to the project was rather challenging. This however, was not a matter of access, or restrictions, documents were actually willingly shared. Instead, the issue was tracking where such documents were located and the lack of documents altogether.

Interestingly, while there was a proliferation of documents detailing every stage of the Ambangal Mini-hydro Plant, the same cannot be said about Hungduan. On his observations regarding the writing and evaluating of recommendation forms and research grant proposals, Brenneis suggests that such forms have, “careers, being animated by and animating meetings, contributing to specific and consequential outcomes” (Brenneis, 2006: 65). As such, documents are not simply two-dimensional representation that details and expresses aspects of an initiative. Instead, they themselves are active, interactive and transformative; documents, “allow and support a certain form of embodied interaction” (Harper, 1997: 22).

However, what defined my experience in Hungduan is precisely the lack of documents regarding the unrealised proposal. Though, such sparse documentation is the actual archive of a project that was disrupted in its coming into being. Yet, although absent, traces of the project and the documentation of its underdevelopment reside in the likewise underdeveloped and incomplete documents. In this way, a project that never came to be, and the lacking reports which documented this project both simultaneously constitute absences. It is in what is not there, what is missing, that makes the halted project so salient to community members and myself. Such traces activated the frustrations and questions of actors. As a result, project proponents became even more determined and keen to finding alternative sites for a similar project, Hungduan community members further reflected on alternatives to community electrification and I was prompted to expand the scope of my own research.

Actually, the traces of documents is rather telling of the tensions and negotiations entangled in the origin story of the Ambangal Mini-hydro Plant and how the project was pursued. The multiplicity of documents and procedures which unfolded in Kiangnan can only be understood by understanding its lacking in the case of Hungduan. The lack of documents in the case of Hapao, exhibits how abruptly the project was withdrawn from the municipality. This speaks greatly of the challenges in the flexibility of how Hapao community members can deliberate, address and respond to changing needs and aspirations. In the following section, I consider the presence of small-scale hydropower technology in another part of Hungduan, and why this is

significant in relation to the situation in Hapao and the zoning of heritage clusters, which I will further discuss in the chapter's final section.

A HIKE

This section details my discovery of other small-scale hydropower technologies installed in Ifugao Province, particularly one that was implemented in Maggok, Hungduan. As a volunteer for Save the Ifugao Terraces Movement, I met various community members involved in the organisation's projects. Upon introduction, I would often be asked about my research in Ifugao, and when it came to describing my interest in hydroelectric projects, some members of the organisation assumed I was talking about the Maggok hydro plant, resulting in my clarification. In my conversations with Roland – a community organiser and a volunteer⁴ for Save the Ifugao Terraces Movement – he informed me about other small-scale, hydroelectric turbines in the province, especially ones which involved Save the Ifugao Terraces Movement. In a study report I accessed from Hungduan's municipal office, the document listed that until 2004, there were seven small-scale hydroelectric power equipment located in the municipal of Hungduan. The study, undertaken in a joint effort by Philippines' Department of Energy and the Japanese International Cooperation Agency, provides an inventory of small-scale hydropower plants in Philippines (Department of Energy Philippines, 2004).

At more than 40 implemented small-scale hydro-electric devices, the Cordillera Administrative Region of Philippines, which includes the Ifugao Province, tops the list for hosting the most small-scale hydropower plants in the nation (Department of Energy Philippines, 2004: Annex 1). My discovery of this fact, along with my encounter of small-scale hydro-powered turbines in Maggok informed my understanding of the location matters regarding small-scale hydroelectric projects in Ifugao. This section particularly details my experience travelling to Maggok, a more isolated village in Hungduan which is the site of a micro-hydro plant managed

⁴ Though I was considered a volunteer, I, along with other research students who worked with the organization were also labelled as student researchers, as being affiliated with the organisation entails that we share with the organization texts that arise from our research.

by Save the Ifugao Terraces Movement. In a later section, I compare the situation in Maggok to the state of comparable small-scale hydroelectric projects in more accessible parts of Hungduan, especially the villages surrounding Hapao River.

On a particular morning in February, 2012, the Bulahao residence in Kiangnan became the hub for a hiking trip from Nagacadan, Kiangnan to Maggok, Hungduan. Two engineer researchers and I were preparing to undertake this hike, which was led by Roland. Our reason for the hike was to visit a micro-hydro turbine in Maggok that had been out-of-service and needed repair. From Kiangnan's town centre, we loaded up our backpacks onto a tricycle, and in 15 minutes, via a semi-paved, rocky, motorised road, we arrived at a hamlet in the village of Nagacadan, Kiangnan. From the motorised road, we began our hike into the heritage rice terraces, which eventually lead to more forested areas, characterised by muddy, inclined, remote trails in the already difficult local terrain (Photo 5. 2).

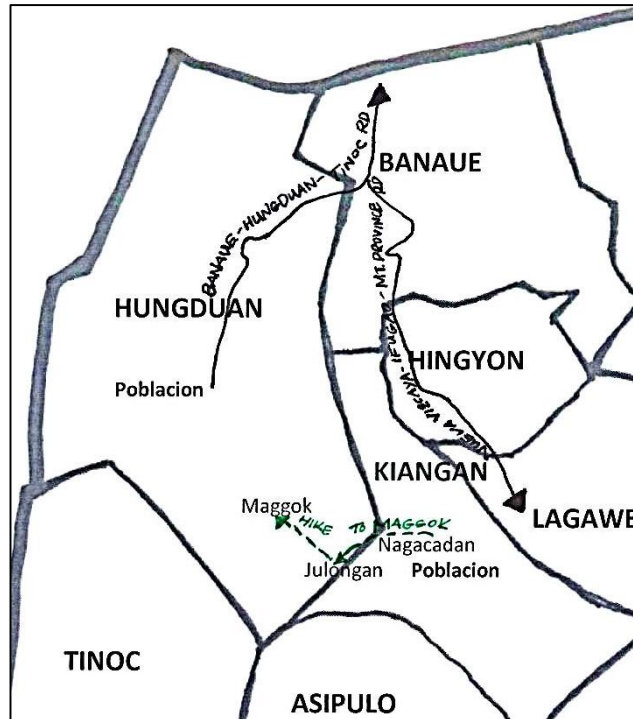


Photo 5.2: Trails to Maggok

The two researchers, who had traversed the route from their visits in previous years, were already giving me admonitions, often expressing their own aversion for having to embark on this hike. Actually, even before the arrival of the two researchers, I was constantly regaled by stories of hikes to Maggok by staff of the Save the Ifugao Terraces Movement, such as: the mounds of *carabao* (buffalos) faecal matter that littered the trails, being caught in the rain, or sleeping on the benches inside Maggok's *barangay* hall (village hall). Throughout my stay in Ifugao, Roland and I constantly spoke about the possibility of me visiting the turbine. This proved

to be a challenge, since most of his visits to Maggok were often due to repairs that he had to carry out, with the assistance of Kenneth, an eco-tour coordinator for Save the Ifugao Terraces Movement, who had mechanical skills and owned a motorbike repair shop in Kiangnan. It is particularly through my conversations with Roland that I began to learn more about the presence of small-scale hydroelectric power in Ifugao.

Our approximately 5km-hike to Maggok, which is more aptly measured in time than in distance, took roughly five hours to complete (Map 5.2). Throughout the hike, we encountered a few residents from Hungduan heading towards Kiangnan or returning from Kiangnan. Admittedly, while our whole party was fitted in hiking boots, some residents traversed the route wearing sandals, with one father moving up a muddy, inclined slope whilst carrying a child, leaving the two researchers and me feeling rather inadequate. Since Maggok borders the municipal of Kiangnan, residents of Maggok are ironically closer to Kiangnan's town centre than to their own municipal centre in Hungduan. Therefore, residents of Maggok prefer to hike into Kiangnan for various reasons, such as: buying necessary supplies, going to a clinic, or to use Kiangnan as a stopover to Lagawe, the provincial capital. The closeness of Maggok to Kiangnan has often caused the residents of Kiangnan to comment that community members of Maggok are geographically Hungduan, but socially Kiangnan.



Map 5.2: Approximated route from Nagacadan, Kiangnan to Maggok, Hungduan

Actually, the pathways along this route are filled with structures which are very much illustrative of the activities that occur on the trail. There are shaded sheds, along with both short and tall wooden benches. Taller benches are meant for a quick stop, in which people carrying heavy bags and sacks would lean on the bench, while standing, and rest their bags on top of the bench. As such, these structures shape the journey through these footpaths, while reciprocally being shaped by those who traverse the route. The movement through these paths is essential to understand how people dwell in a particular landscape, in terms of what activities are carried out in a given environment and how they are carried out. However, the journey through these footpaths is a sociospatial relation that is deeply tied to the lack of motorised roads and electricity. In this case, that which is missing accounts for how activities transpire.

During our hike, Roland explained that because Maggok is not electrified, some residents travel to Kiangnan simply to charge electronic devices, such as mobile phones. One of the researchers from Pennsylvania asked whether there was an or-

ganised manner in which the charging of phones was accomplished more efficiently – for instance, with residents taking turns to charge a collection of mobile phones for their fellow residents – Roland was unaware of such an arrangement, but acknowledged the possibility of such a coordinated system. Maggok’s lack of electrification is not a rare situation in Ifugao; rather, its state of non-electrification is the norm for many isolated hamlets in the municipality. According to a joint report done by the municipal government and the National Commission of Indigenous Peoples, in 2006, only one village of Hungduan’s was fully electrified (National Commission on Indigenous Peoples and Municipality of Hungduan, 2006: 65-66). According to residents, improvement has been slow. The longest period of time I stayed in Hungduan was one week in the town centre. During the week of my stay, we had two full days of unscheduled power outage, despite the fact that there was neither heavy nor moderate rain.

After reaching the Maggok *barangay* hall (village hall), we hiked for another hour to the actual site of the turbine. Hidden in a tin-roof covered shed, and sitting on a path along the face of a rocky slope, is the Maggok micro-hydro turbine (Photo 5.3). At the time of our visit, the turbine was inoperable due to damages, and the two researchers were assessing its viability. One of the researchers commented on the precarious location of the hydro plant, especially in the advent of erosion, a frequent occurrence in Ifugao. The next day, upon our return from Maggok to Kiangnan, we encountered a farmer who, after conversing with Roland, led us to another community-managed hydropower, this time a pico-hydro. The pico-hydro⁵ turbine that was in operation was installed along a stream, under a small cascade. This pico-hydro was less than an hour hike from the micro-hydro we visited the day before (Photo 5.4).

⁵ For an explanation on the different types of small-scale hydro-electric power, refer to Chapter 4. Of the small-scale hydro-electric power, the pico-hydro is the smallest, and has the capacity to provide power for lightbulbs and small appliances (i.e. radios) for several households. Unfortunately, I do not have information on how many households are being served by the pico-hydro plant we were shown in Maggok.



Photo 5.3: Maggok micro-hydro turbine

From top to bottom: Maggok micro-hydro plant shed; micro-hydro plant being repaired



Photo 5.4: Maggok pico-hydro turbine

In a thoughtful ethnography of Manggarai communities in West Flores, Indonesia, Allerton analyses both people's movement and settlement in relation to, “the power of a collective, shared landscape shaped by state development policies and responses to religious change” (Allerton, 2013: 3). In it, Allerton explores the social and material relations enlivened by pathways. Speaking of trails in the mountainous village of Wae Rebo, Allerton describes gradual improvements of footpaths while noting how, “as one of the attractions of Wae Rebo for tourists is presumed to be sporty ‘hiking,’ the villagers have gradually realised that the local government is unlikely to pay for the construction of a road to the mountain village” (161). Though not explicitly stated by the author, what is interesting about the description regarding Wae Rebo’s lack of motorised roads is that, though such unconstructed roads are physically not there, they are still physically experienced in the sociospatial relations they maintain, precisely because of their absence. In this case, uncompleted

roads shape the experiences of tourists who hike through the village, along with residents who undertake these hikes as part of their quotidian.

In Maggok, and other villages in Hungduan like it, the lack of motorised roads is integral to the relationships that one has with and within their environment, especially in relation to necessary infrastructure. The lack of viable road networks results in the scarcity of distribution lines, which then leads to inadequate or no electricity. However, in response to these deficiencies, the absence of roads are likewise made present in the emergence of technical innovations, international and local alliances, and maintenance of ties between the people of Maggok to the neighbouring municipality of Kiangnan. In this way, potential avenues for people's capacity to ensure well-being for themselves and their kin arise from what is missing. However, despite the unexpected positive engagements emerging from the lack of necessary infrastructure, non-existent roads and power lines are also intruding in people's everyday lives by compelling residents to undertake inefficient and sometimes precarious trips for both mundane and urgent needs. Implicated in the absence of roads is likewise the absence of channels to job opportunities, necessary facilities (i.e. hospitals) and basic amenities.

In Hoorn's study on edifices considered as eyesores by urban denizens within Austria and Germany, she mentions that, "it is in architecture's 'nature', despite, or perhaps precisely because of its supposedly durable three-dimensional materiality and its presence in public space, to potentially embody or provoke polemics" (Hoorn, 2009: 14). Amongst these eyesores, which Hoorn labels as 'undesired architecture', projects that never come into being are especially salient, "because their existence was questioned and rejected before they could even be realized" (Hoorn, 2009: 15). As Hoorn notes, unrealised projects "embody all that was ever rejected from its (idealized) built environment" (ibid). In a sense, such projects embody both *what could have been* and *what has become*.

Though hydropower technologies are not architecture per se, Hoorn's ideas on 'undesirable architecture' in relation to 'idealized environments' provides a means of grasping sites of negotiations in Ifugao. In the following chapter, I detail the zoning procedures which created inconsistencies in the expanse of zones de-

marked as heritage clusters. In doing so, I discuss how discrepancies in the zoning of heritage clusters are tied to scrutiny or funding regarding development initiatives in villages of Ifugao Province. When considering the variable situations of different villages within Hungduan, along with the completion of the Ambangal Plant in Kiangan, what is at stake is what 'idealized built environment' is being undertaken in the implementation of both conservation and development initiatives. Delving into these sociospatial matters reveal how sociotechnical activities involved in such initiatives are just as much about what is lacking or not there.

Though the focus of this chapter is primarily on a proposed mini-hydro plant in Hapao, a discussion on Maggok's small-scale hydroelectric turbines demonstrates how the placement of hydroelectric devices involves matters which concern location. Similarly, the two hydroelectric turbines placed in close proximity to each other in Maggok, reveal the extent of hydroelectric enterprises in Ifugao Province, an extent that was revealed to me only from my own queries regarding the Ambangal Mini-hydro Plant. Movements within and between places undertaken by varying actors (including the researcher), can illuminate that the negotiations regarding development initiatives in Ifugao, are concerned with the spatiotemporality of effects. A peek into the micro and pico-hydro power technology in Maggok allows a way to better grasp the contentions that came with the plant proposal in Hungduan, which I detail further in this chapter. The brief sojourn in Maggok sheds light on the sociospatial concerns at the crux of why the Hapao micro-hydro plant proposal did not come into being, while a similar project was realised in Kiangan. In the following section, I detail these concerns, focusing particularly on what is implicated in the zoning of heritage clusters.

A BREAK

This section further discusses the impact that heritage zoning has had on the municipality of Hungduan. Here, I return to a discussion on the implications of the unrealised mini-hydro proposal in Hapao, Hungduan in relation to the previous section on the small-scale hydropower equipment installed in Maggok, Hungduan. In

their foray into small-scale hydro developments particularly in Maggok, Save the Ifugao Terraces Movement won the Ashden Award given by the UK-based charitable organisation, Ashden.⁶ Despite the high profile nature of the Maggok micro-hydro project, any mention of hydroelectric technologies is noticeably lacking in UNESCO reports, until 2005-2006, the period shortly after the mini-hydroelectric power was proposed for Hungduan. According to UNESCO state of conservation reports:

At the request of the State Party, a UNESCO reactive monitoring mission will be organized to the property from 30 May to 5 June 2005 to enable the mission to assess the impact. IUCN [International Union for Conservation of Nature] welcomes the efforts of Japanese Government in assisting in the conservation of the property. IUCN is of the view that the proposed hydropower plant would be useful and helpful, only when placed within the appropriate cultural, environmental and economic context (United Nations Educational, Scientific and Cultural Organization, 2005: 41).

In 2006, following the discontinuation of the proposed Hungduan mini-hydro plant, monitoring reports noted:

The urgency of managing unregulated development and assessing the impacts of infrastructure projects on the cultural landscape has been expressed in the previous missions. In 2005, a UNESCO mission evaluated the status of a mini-hydro power plant which was proposed for construction in Ifugao Province, where the World heritage property of the Rice Terraces of the Philippine Cordilleras is located. The mission found that the proposed hydro plant had not proceeded... The proposed mini-hydro plan, on the other hand, has been relocated from Hungduan cluster to Mappit and Ambabag, areas outside the WH perimeter, but which may be a potential expansion site or a buffer area for the World Heritage property (United Nations Educational, Scientific and Cultural Organization, 2006: 7-8).

However, it must be highlighted, as previously revealed, prior to UNESCO's 2005 reactive mission, small-scale hydropower technologies have been implemented throughout the Ifugao Province.

UNESCO's reaction to the proposed plant in Hungduan was recognised by the Provincial and Planning Development Office. A key staff member who was heavily

⁶ This was a big break for the Ifugao NGO, as winning the award entailed one of the members travelling to the UK and being presented the award by Prince Charles.

involved in the proposal recalls:

The study went mostly in Hapao, but of course during the consultation meetings we encountered a problem with the UNESCO issue, because they said there should be no major infrastructure that should be built within the declared World Heritage Site. They were invited to join the study group, because they (the Japanese study team) know for a fact that Hungduan is part of the World Heritage Site.

Though despite the residents' apprehensions, most were also eager to enter into communications regarding possible design options. As one member proclaimed, "I think there has to be an alternative to tunnelling, but there was no discussion of alternatives." One resident informed me about a mini-hydro plant located in a different province, whereby pipes were laid out without the need for an excavation. Many suspected that any pursuit for alternative designs was compromised by conservation concerns. As one resident expressed, "When it comes to funding, when there's outside funding, they (UNESCO) caution them (project proponents)." The concern here then is regarding impediments to community member's autonomy, particularly in their ability to be consulted or to enter in negotiations regarding possible transformations facing their community.

A staff member of the Provincial Planning and Development Office also suggested that further pursuit of the project in Hapao would have been futile, regardless of the design due to the distinction of the location, as she remarked:

After the exploratory thing, the thing that should have followed was to see who can fund the project, but the thought was, why look for investors for Hungduan, when it will be difficult to find one especially because of the UNESCO issue. So it will seem like a wasted effort if they invest on more studies, only to be ultimately rejected because of UNESCO, so why force the issue.

As the mayor of Hungduan explained, according to a legal mandate, foreign-funded projects must be approved by Philippine's National Economic and Development Authority (NEDA), and international conservation institutions wield enough influence to sway decisions established by the national agency.

The challenge in Ifugao Province is precisely that certain principles were being legitimised with policies that are pervasive. Such principles are in fact guided by

literal views, more specifically, what can be seen and not seen from viewing points and pathways along the more famous rice terrace clusters of Hungduan. These views become potent particularly during the monitoring visits of conservation agencies. Once admonitions are established against particular activities within the terraces, organisations are less likely to fund projects that might be contested not only by members of the local communities, but also members of transnational organisations. As a resident observed, “There was no follow-up because everybody (on monitoring reports) was saying it was bad, and that was it, nobody (funding bodies) wanted to touch it.”

However, in the absence of distinct rice terraces, particular villages of Hungduan are spared restrictions, because activities in these areas are not scrutinised. Engineer Buyuccan admitted that actually, once they transferred the project away from Hapao, and Hungduan in general, they encountered less contestation from conservation agencies. When the Provincial and Planning Development Office suggested other potential sites in the municipality of Asipulo, Engineer Buyuccan noted, “Of course by then, they were no longer interested because Asipulo is not a heritage site.” Likewise, in the early version of the Hapao proposal it did not yet stipulate the establishment of a conservation fund, as it came to be in Kiangnan, which became an additional reason for its eventual rejection.

As previously mentioned, Hungduan has a few, small-scale hydropower devices. In fact, there are two micro-hydro plants in Baang, a village near Hapao. One micro-hydro plant was a project which resulted in the collaboration with Benguet University, a university in a nearby highland province. The micro-hydro project is managed by a cooperative consisting of the community beneficiaries, roughly 25 households. Each member pays 20 pesos per month, ten pesos is allocated for maintenance, seven pesos for the operator running the plant and three pesos for the collector who account for the 20 pesos membership dues. These micro-hydro projects were born out of the communities’ own initiative who sought out the collaboration with Benguet University.

Though many are eager to point out that such projects, being micro and pico-hydro plants, are much smaller, and located in areas that are hardly noticed. In the

case of Maggok, the village is located within the forested areas of Hungduan, and not surrounded by rice fields. Thus, although the entire municipality of Hungduan is considered a heritage cluster, certain areas are more distinct than others due to their contiguous terraced fields, and similarly because they lie along common, navigable routes. It is these more reachable and visible areas that are heavily scrutinised. As one resident jested, “Bring all the buildings in the mountain areas, and what, have all the UNESCO people walk up the mountain? They won’t be doing that, that’s why look, they didn’t see the other micro-hydros.” Though stated with humour, there is seriousness to this observation.

In light of varying actors’ concern over the scale of infrastructural projects, the issue of scale is likewise particularly salient in discussing how development projects are made amenable to conservation initiatives. In a discussion on scale, Tsing insightfully notes that in the process of ‘generalization’ collaborations and incompatibilities involved in the aforementioned projects, are erased, so that “the ‘local disappear compatibly inside the global” (2005: 104). As she points out, these ‘scale-making’ projects “deploy the rhetoric of the universal even as they shape its meanings to their particular processes of proliferation, scale-making, generalization, cosmopolitanism, or collaboration” (Tsing, 2005: 267). Scale in this case, does not only refer to magnitude, it likewise considers overlapping domains of relations (i.e. economic, political, historical, etc.) (Strathern, 1991: xiv; Strathern, 1995; Jiménez, 2005: 158).

To begin with, the very impetus for the project emerged from the Provincial government’s attempt to address the lack of funding for management of the rice terraces and the adoption of a technology that could respond to the inadequate electrification of the province. However, efforts to reconcile a heritage concern, with a concern for infrastructure, came against the Cordillera region’s historical encounters regarding large-scale, state projects (see Chapter 4, regarding the Chico Dam Project). In this way, attending to the dearth of conservation funding and inadequate electricity is implicated in the Cordillera’s tenuous history regarding large-scale projects and state interventions. In fact, the absence of such a large-scale project in Ifugao is not the symbol of the community’s political voice, but the actualisation of it

(see Chapter 4).

As I have also shown throughout this chapter, the Hapao proposal is implicated in the diverse forms of deliberations, as one shifts focus on individual, household, village, provincial and global concerns. In the initial consultation for the Hapao, Hungduan project, individual concern regarding properties emerged, along with the communities' worries over how their source of livelihood (rice-fields) would be impacted. Yet, in revisiting the project, what arose were concerns regarding transparency in communications and the questioning of conservation practices. Outside of Hapao, interestingly, the dearth of easily navigable pathways and the inadequacy of electricity compelled communities in these areas to forge new alliances on both a local and international level, to attempt the application of new technologies. Though, it must be highlighted that the very isolation of such communities facilitated such development initiatives to carry on without scrutiny.

The scrutiny over Hapao, Hungduan is not simply a case of Hungduan's heritage clusters being treated as metonym for the Ifugao Rice Terraces. If this was the case, all of Hungduan would have been scrutinised, since all of Hungduan is delineated as a heritage cluster. Rather, the project proposal is a victim to the actual expanse of the Hungduan heritage cluster and how heritage clusters were demarcated. Thus, the concern for environmental impacts is in relation to a particular visual experience of the Hungduan landscape. This particular visual experience is rooted in what falls within the purview of not only how the heritage clusters were zoned, but also how they are monitored (see Chapter 6). In the process of "magnification and telescoping" (Strathern, 1991: xv), details are both gained and lost. The details that can be observed in Hapao, Hungduan is at the expense of what is not observable in the rest of the municipality.

The activities that unravel in the areas along Hungduan's primary road are more regulated, since these areas are also more easily reachable, though also more electrified. In fact, as some have noted, existing pico or micro-hydro projects are discontinued, not because they are no longer viable, but because electricity from the grid becomes available, a system which requires less management and organisation on the part of the community members. Ironically, the roads and pathways that al-

low areas to be reachable, and that are often a concern for conservation organisations⁷, are actually the very structures that allow heritage conservation representatives to monitor heritage areas. In the next chapter, I further elaborate the connection between seeing and walking, through an analysis of a monitoring mission for the evaluation of the Ifugao Rice Terraces, and the mapping of the heritage clusters.

By commenting on structures, without an acknowledgement of how they are able to see such structures, the idea of heritage conservation disconnects the environment from their inhabitants. Such a sentiment was felt by many of my interlocutors when they spoke about the abrupt halt of communication regarding the project proposal, and the lack of dialogue that followed once the project was deemed destructive. As one informant articulated, “Whenever there’s development they are always commenting on it, but without really bringing anything in, so sometimes I question why it is like that, because if it’s like this then people will go outside of Hungduan, because there will not be any jobs here or anything.”

Regarding the paving of channels and dikes, a Hapao community member related the following:

Before, during our time, when we were going to school, the dikes were the pathways, and they were very slippery. Now you have these people who don’t want that cemented. What do you suppose? You think the kids today should have that same experience.

The community member likened restrictions on cementing dikes to child abuse, noting that kids will slip on muddy dikes and hurt themselves just on their walk to school, so that leaving paths unpaved is a disregard to the safety of Hapao youths. Similarly, in response to recommendations made by conservation agency representatives, a community organiser from Kiangnan noted that, such representatives only stay in the province for a short time. She noted that perhaps if representatives stayed for more than a few months, and without bringing with them necessities from Manila, and without being accommodated with extra amenities, then they

⁷‘Conservation organisations’ in this case refers to UNESCO, International Council on Monuments and Sites, International Union for Conservation of Nature and UNESCO National Commission of the Philippines.

would revise their views on preservation.

The comparison between Kiangnan and Hungduan reveals how the principles behind conservation objectives are enacted in a way that creates or are created by the inconsistent zoning of heritage clusters and within heritage clusters. The varying expanse of areas designated as heritage clusters figure centrally in the need to address what community members want present in their villages, and what is deemed as an impediment to the maintenance of the Ifugao Rice Terraces. In Hungduan, concerns over the proposal were regarding what the project *might do*, in this case, cause damages to terraces. This pre-occupation with a potential undesired effect, is evident in how the Ambangal Mini-hydro Plant is viewed. In a monitoring visit in 2011, representatives of International Council on Monumental Sites commended the construction in their report:

...a mini-hydro power plant has been built in the municipality of Kiangnan, but *outside of the World Heritage designated areas*. The plant, which was visited by the mission team, has *minimal visual impact* on nearby terraces. Moreover, the building of a necessary road to the plant has made it easier for farmers to reach the terraces – and properly tend to them. The other very real benefit is the generation of funds for conservation as 95% of net income will fund the repair of the terraces through the Rice Terraces Conservation Fund (UNESCO, 2011: 17, emphasis my own).

In this way, the desired effect is in fact the minimisation of undesired effects. In light of the previous chapter, and the reflections of Kiangnan community members, the above comment now seems too idealistic.

The various entanglements and relations centred on an absent technology, illuminates the very real potentialities and consequences of absences (Fowles, 2010: 27-28). While Hungduan residents, who have seen or heard about Kiangnan's mini-hydro plant, may feel that they have missed an opportunity, they are also just as likely to not dwell on the tensions that arose from the implementation of the Ambangal Mini-hydro Plant. Inversely, while Kiangnan members may bemoan their unmet expectations, they are just as likely to take the plant for granted. However, I must note that such tensions in Kiangnan arose precisely because they were allowed to, because there were procedures which involved dialogue via consultations. This

key stage is noticeably missing in the truncated progression of the proposal in Hapao. This is partly a matter of location, but likewise an issue of a technology that could not overcome or accommodate a desire for absence, contributing to its own erasure.

Ironically, as I briefly mentioned in the previous chapter and further elaborated here, what transpired in Hungduan actually strengthened the proponents' pursuit to construct a mini-hydro plant in Kiangnan. In this case, project proponents moved from one municipality to another until they were able to carve out a place in Kiangnan. Likewise, in speaking with Kiangnan members, despite complaints, there is always a sense of pride on what was endured to implement the Ambangal Mini-hydro Plant, especially considering the fate of previous projects. Thus, the approved and continued operation of the Ambangal Mini-hydro Plant is owed both to what it made present, and what absences it ensured. The multiple potentialities of development initiatives and the way they are shaped by zoning, highlights differing visualisations in the management of the Ifugao Rice Terraces and undertaking of rural development. By presenting local critiques and connecting these to local concepts of sustainability, this chapter reveals what is implicated in the enactment of particular perspectives. However, as I argue in this chapter, what community members are concerned with is not simply for their own perception and expectations to be met. Community members' point of contention is also in how their part in decision-making processes is limited and restricted as avenues for discussions get curtailed.

CHAPTER 6: MIXED-VIEWS

The rejection of a mini-hydro plant initiative in Hungduan and its eventual implementation in Kiangnan is demonstrative of how heritage zoning furthers inconsistencies in the establishment of infrastructural projects across the province. Despite the practice of terraced, wet-rice agriculture all throughout Ifugao, UNESCO designated five specific sites as heritage clusters, which are spread across four municipalities: Batad and Bangaan, Banaue; the municipality of Hungduan; Nagacadan, Kiangnan and Mayoyao Central in Mayoyao.¹ According to the nomination, these sites were designated due to the following reason:

The rice terraces of the Philippines cordilleras are an unmistakable example of a landscape resulting from the combined works of nature and man, illustrative of the evolution of human society and settlement over time, under the influence of physical constraints presented by their natural environment and of successive social, economic and cultural forces...clusters presented in this nomination are the best surviving examples of tribal management still in practice. Traditional methods are used in the maintenance of environmental balance (United Nations Educational, Scientific and Cultural Organization, 1995: 48).

The zoning of heritage clusters categorises the landscape of the four municipalities into bounded core and buffer zones. Demarcated core zones consist of the actual villages covered under an inscribed heritage cluster. Buffer zones on the other hand, are adjacent areas, with extended lenience on human activity. Though allowing for some commercial and residential activities, these areas must still support conservation efforts for the designated, protected core zones. Conservation organisations, recommend that activities within these buffer zones should not hinder conservation efforts in the heritage clusters. As I outlined in Chapter 3, zoning is central to Ifugao land-use. This chapter addresses heritage zones in relation to local articulations and enactment of zoning. A focus on the zoning of heritage clusters extends discussions on conservation efforts that especially feature the contextual and complicated configuration and deliberation of boundaries (Harwell, 2011: 184).

¹ Consisting of nine villages

As in the chapter that preceded this one, I once again present local critiques on interventions. However, here, I further account for not only how community members adapt external framework but also how they challenge notions and practices of sustainability that misunderstands local contexts. This chapter particularly explores dilemmas in conservation interventions with respect to the Ifugao concept of 'good' in how rice fields are visualised. The Ifugao concept of 'good' is considered in regards to conservation practices with a preoccupation of a visual experience of the Ifugao Rice Terraces. Addressing the dynamics in varying visualisations reveal how the Ifugao adapt initiatives with ethos of sustainability, while they simultaneously scrutinise intervention efforts that obfuscate Ifugao principles. In discussing these visualisations, I focus on how various actors envision present management of the terraces in relation to the well-being of both present and future community members. As such, I find useful Okely's (2001) analysis of 'vision', and her distinction between 'seeing' and 'looking'. In this case, seeing, in contrast to looking, is a form of perception that requires the whole body as the means "to understand and resonate with the world" (Okely, 2001: 104), whereby frames of visualisation shape expectations (de L'Estoile, 2014: 64).

Throughout this chapter, I elaborate on varying visualisations and expectations inextricable to the management of the Ifugao Rice Terraces, by discussing the process of mapping and monitoring. I especially highlight that for Ifugaos, visualisations relate to an expectation of good harvest necessary for the well-being of community members. It is not simply farmers who rely on these fields, but landowners, who although not involved in agricultural activities, also benefit from a bountiful harvest. In effect, constituted in a rice field is the potential of prosperity, in which the well-being of the field is entangled with the well-being of those who depend on these fields. On the other hand, how conservation is visualised, which I argue is tied to the notion of 'beauty', also implicates the available means for community members' to achieve well-being. Particularly, the stakes which are entangled in the expectations of conservation agencies are potential restrictions to rural development that actualise economic opportunities, social and physical mobility and access to services.

In the promotion of sustainable management for the Ifugao Rice Terraces via conservation intervention, community members largely perceive sustainability as one-sided. Though many acknowledge the principle of stewardship in conservation efforts, community members nevertheless express that such activities have compromised present and future improvements on living conditions in Ifugao. Integral to understanding these varying views, and their enactment, are the sociospatial relations involved in the act of monitoring and mapping the Ifugao Rice Terraces. In the chapter, I especially delve into the process of mapping as a form of planning. In this way, I elaborate on how orientations toward the future actually engender a multiplicity of present engagements. These engagements are constituted in the varying conceptualisation of heritage and how their enactment shape conservation and development initiatives. As I underscore throughout this chapter, heritage management interventions implicate people's present and future well-being as it relates to resident's aspirations for improved living conditions in the rural province.

To highlight the connection between visualisations and expectations, I specifically detail a Joint Reactive Monitoring Mission carried out by UNESCO, the International Council on Monuments and Sites along with the UNESCO National Commission of the Philippines, in order to evaluate the state of the Ifugao Rice Terraces. One key issue arising from the monitoring mission was the requirement to map the core and buffer zones of each heritage cluster. In investigating the processes of monitoring and mapping, I likewise delve into the potentiality of maps. My approach in apprehending maps is partly influenced by Rheinberger's study of biochemistry lab experiments which eventually led to modern molecular biology (1997). Here, I borrow Rheinberger's concepts of 'experimental systems'. Rheinberger describes 'experimental systems' as question-generating, whereby they are "vehicles for materializing questions. They inextricably cogenerate the phenomena or material entities and the concepts they come to embody" (1997: 28).

Essential to 'experimental systems' are what Rheinberger refers to as 'epistemic things', ambiguous devices and processes that "present themselves in a characteristic, irreducible vagueness. This vagueness is inevitable because, paradoxically, epistemic things embody what one does not know" (1997: 28). 'Epistemic things'

interact with 'technical objects', and these technical objects or conditions, structure what is possible with epistemic things. When epistemic things are stabilised, they are transformed into the necessary, standardised techniques required in an experiment (1997: 29). Though this does not mean that experimental systems are stabilised, but rather, stabilised conditions are reconstituted in the dynamic process embodied by 'epistemic things' that act as a mechanism for generating questions. In this way, the interplay between 'epistemic things' and 'technical objects' allow for the proceduralisation of experiments, while still allowing experiments to be open-ended.

The importance of Rheinberger's observations to my own endeavour is that maps lend themselves to the production of questions. Maps do not simply provide a representation of space, but likewise, they allow for the procedure of how spaces are transformed and represented. All the while, maps are generated by and generative of negotiations concerning spatial representations and transformations. Especially, in the case of Ifugao Rice Terraces, areas to be demarcated are measured and surveyed, and their demarcation necessitates their monitoring, thereby ensuing other methods of measurements (i.e. percentage of terraces abandoned, eroded walls, impact of widened roads). Additionally, the mapping of the Ifugao Rice Terraces illuminates the salient issue of scales, especially in regards to what Tsing refers to as, 'generalizations', a process, by which, "Scale is the spatial dimensionality necessary for a particular kind of view, whether up close or from a distance, microscopic or planetary" (Tsing, 2005: 58). As Tsing points out, in scale-making projects, "small details support great visions and the universal is discovered in particularities" (2005: 89). The delineation of core and buffer zones are practiced as models for land use and development planning, especially for designated heritage areas. However, the zoning of heritage clusters likewise shapes how heritage management is enacted in ways that implicate culturally specific sociospatial engagements.

Yet, maps are also mutable, they are affected just as much as they affect. Throughout the chapter, I examine the different phases involved in the drafting of the core and buffer zone maps for the Ifugao Rice Terraces. Specifically, I discuss the following: monitoring mission that was influenced by and influenced maps, the ac-

tual surveying of the core and buffer zones, which again required an amalgamation of maps, and the presentation of the drafted maps at an official ceremony in Banaue Hotel. The finished maps presented at a ceremony did in fact fulfil a UNESCO recommendation and in effect, contributed to the eventual fate of the Ifugao Rice Terraces on the World Heritage List. However, as I suggest throughout this chapter, it is not the finished, presented map that is potent, but rather the mutable map, once stored and under the hands of the provincial government that will continue to be effective. It is this archived, mutable map that will periodically be released, consulted in municipal and provincial development plans, thus enlivening negotiations that were in the first place, essential in the maps coming into being.

In Winichakul's thoughtful historical analysis on the mapping of Siam, he addresses the mapping of Siam's boundaries by the French, British and Siam in the late 19th century and early 20th century. As Winichakul elaborates, the act of mapping was not merely a device for the carrying out of military and administrative objectives; rather, "mapping turned both operations into its mechanism to realize its projection, to concretize its 'enunciation'" (1994: 129-130). Thus, he conceptualises a map as an 'active mediator' in which, "A map anticipated a spatial reality...In other words, a map was a model for, rather than a model of, what it purported to represent" (130). As will be illuminated by this chapter, the delineation of heritage clusters and buffer zones does not only encapsulate a particular vision of the landscape, it is the very way such a vision was realised. Yet, because and despite of categorising and maintaining demarcated zones, local visualisations bring forth appraisals over the very process of monitoring and mapping zones.

MONITORING

In his account of Ifugao mythology, American anthropologist Barton, who resided in Ifugao in the early 20th century, noted a striking but very brief observation. As he relates:

Despite the fact that the Ifugao's habitat is one of surpassing beau-

ty...the myths lack any reference to beauty of landscape or of natural objects...It is true that when an Ifugao stops to rest on his steep mountain trails he seems to choose a jutting point, open so far as possible on all sides, and giving a good view...But I am convinced that he gazes vacantly, that the scene arouses no emotion in him. He probably chooses the point as his resting place because the breeze is good, because it is relatively safe from ambush (Barton, 1955: 19-20).

I was faced with this particular conundrum during my fieldwork, of community members who explicitly asserted that they do not perceive any beauty in their landscape, but who nevertheless acted with appreciation for it, by way of stopping to survey the land. In fact, people have particular spots along the trail that they favoured compared to other sections of the trail. Similarly, they will often express frustration or approval of how a rice field looks. Yet, they express such sentiments *without* any association to beauty. As I detail further in the chapter, this conundrum prompted me to reflect on the possible visualisations of this landscape and what are the implications of such visualisations.

Barton's observation implies and assumes that perception must necessarily be tied to a culturally specific experience of aesthetic attached to the appreciation of beauty. Yet, the idea that beauty and aesthetics are linked is problematic. As Howes points out in his contribution to an anthropology of the senses, aesthetic derives from *aesthesis*, which generally refers to sensation and perception (2005: 45) and not related to 'beauty' per se. However, the word was appropriated by philosopher Alexander Baumgarten, giving the word its modern association as a 'critique of taste' (Gregor, 1983: 361). I do not suggest that monitoring missions operate via a perception of the Ifugao Rice Terraces as art, hence their preoccupation with conservation of a 'heritage' articulated in visual terms. Indeed, conservation agencies are particularly attuned to the perception of the Ifugao Rice Terraces as an agricultural resource. The issue is not that there are varying definitions of what is being seen. Rather, at the crux of tensions regarding the evaluation of the Ifugao Rice Terraces are conflicting forms of visualisations, the varying ways that the landscape is experienced.

Several weeks into my residence in Kiangan, some community members, par-

ticularly those working in the civil and non-profit sectors, began to buzz about an impending monitoring mission from representatives of conservation agencies. The visit marked the final year of the Joint Reactive Monitoring Mission carried out by UNESCO, the International Council on Monuments and Sites along with the UNESCO National Commission of the Philippines. This particular Joint Reactive Monitoring Mission is just one in a series of regular visits to the province since the designation of the Ifugao Rice Terraces as an endangered World Heritage Site in 2001. While those directly involved in the planning of the visit bestowed a great deal of attention to the forthcoming event, a majority of community members were indifferent to it.

Some had even forgotten about the occasion, and was only reminded by other people's mention of it. Even my host-mom, who is regularly informed and active in community affairs, was also detached, despite her own interest in the discourses surrounding the maintenance of the Ifugao Rice Terraces. The mayor's executive assistant admitted that most people are not at all concerned or even aware of being on a World Heritage List, much less being deemed as an endangered site. In fact, as she acknowledged, only those whose work entails them to engage with conservation agencies are heavily invested in the activities surrounding heritage conservation. Despite not being aware of UNESCO lists, community members recognise the terraces value as a national landmark, or even a world landmark, and realise the distinction of their agriculture practice.

After its placement on the World Heritage Sites in Danger List, a Master Plan was drafted for the maintenance of the Ifugao Rice Terraces (Ifugao Provincial Government, 2004), which was a result of stakeholders' workshops conducted in Ifugao. The plan was established through discussions amongst international and national heritage agencies (i.e. UNESCO and National Commission for Culture and arts respectively) along with the national, provincial and local governments, and community members, especially the cultivators. Rachel, a consultant and architect from Kiangnan, worked on several conservation initiatives, and she describes the drafting of the master plan as truly a collaborative endeavour. As she recalled:

When I joined the first stakeholders' workshop I was overwhelmed by the presence of farmers and international consultants, and I saw how

they had conducted the consultations, and at that time, it really was a dialogue; there were a lot of consultations with the community.

I must note that Rachel has pointed out that overtime, conservation agencies have deviated from the collaborative nature of that initial meeting and the consultations have become less dialogical, or that certain representatives from conservation agencies are more collaborative than others. Based on aspects of the Master Plan, international conservation agencies such as UNESCO and the International Council on Monuments and Sites created their own benchmarks on what to expect in the maintenance of the Ifugao Rice Terraces. Regular visits to the heritage clusters were conducted to evaluate the progress in the maintenance efforts.

The evaluations performed during these visits determined whether the Ifugao Rice Terraces were to: remain classified as an 'endangered' site, be removed from the endangered list and retain their status as a World Heritage Site, or to altogether lose their designation as a UNESCO World Heritage Site. The Joint Reactive Monitoring Mission which occurred on this particular year was the final visit before UNESCO decides the fate of the Ifugao Rice Terraces as a World Heritage Site. During the Joint Reactive Monitoring Mission, representatives from UNESCO, the International Council on Monuments and Sites and UNESCO National Commission of the Philippines evaluated each of the heritage clusters. In each of the heritage clusters, the representatives, whom I will hereafter refer to as 'the monitoring team', were treated to activities such as hikes and cultural performances. Each visit also included a consultation forum between the monitoring team and community members. After all the heritage clusters had been evaluated, a final, provincial-wide forum was held in Banaue Hotel.

Prior to Nagacadan, Kiangnan the team previously visited other heritage clusters in the municipality of Mayoyao and Hungduan. At the time of the Joint Reactive Monitoring Mission, I was currently volunteering for Save the Ifugao Terraces Movement, a local NGO. The organisation played a pivotal role in organising the welcome programme for the monitoring team's visit to Nagacadan, Kiangnan's heritage cluster. As a volunteer for the organisation, I was asked to assist in the preparation of the activities scheduled for the programme. In preparation of the team's visit,

we undertook two consecutive day hikes into Bayninan, a hamlet in Nagacadan. We did so in order to carry supplies and food ingredients to the venue, and to coordinate with the Bayninan Farmers' Association regarding the intermission performances for the programme. On the first day, our early morning hike started from Ambabag, with some volunteers lugging substantial stocks of water and food supplies.

On the day of the actual programme, while we continued to use the Ambabag route to reach the venue, the monitoring team entered Bayninan through the hamlet of Bilong, where an UNESCO signage is erected by the roadside, to mark the heritage cluster of Nagacadan, Kiangnan. The route that starts at the viewpoint and UNESCO sign, signal a sort of front entrance to the terraces, particularly since an alternative hiking route does exist. It should be noted that the alternative Ambabag route does not have a vista point, nor is it marked with tourist signs. In MacCannell's analysis of Goffman's front-back dichotomy in relation to theatre performances, MacCannell regards tourism as a performance with its own front and back stage entrances. MacCannell noted that the front is often a stage, the meeting place of hosts and guests, whereas the back regions are where locals congregate (1973). However, to reduce the differences between the two routes into front-back, inauthentic-authentic dichotomies would be a simplification. Though visitors are often directed to a particular route, both routes are equally utilised by locals and both options are available for tourists. When leading Korean tourists on hikes, it is not uncommon to use the Bilong route to go to Bayninan, but return via the Ambabag route.

What is noteworthy in the comparison between the two routes is how the topography impact the way the trails unfold and what this means to the walkers' movement and the visibility they are afforded. Sections of the Ambabag-Bayninan route have vegetation towards the edges of the trails, thus providing shade on hot days, but also obstructing a panoramic view of the Nagacadan terraces. From Ambabag, upon reaching the village of Nagacadan, trails become noticeably steeper; they unfold in a vertical way in which reaching Bayninan necessitates climbing steep, steppingstones. Reaching Bayninan from Bilong, Nagacadan, the gateway of the heritage cluster, provides a different experience. Vegetation along this route is not to-

wards the clearing, but towards the side of the mountain. Though there are sections of the trail lined with trees and reeds, where views are obstructed, it still however, provides a more panoramic view of Nagacadan, with more open and expansive views of the streams, fields and trees below. Inversely, the trails unfold more horizontally, with winding, gentler slopes rather than steep, makeshift stairs (Photo 6.1). Based on the task of the monitoring team, it is understandable that they were led through the Bilong-Bayninan route. The parameter of the monitoring visit primarily concerns the heritage cluster, thus, rendering a hike through Ambabag unnecessary, and the scenic Bilong-Bayninan route, with open views, became more amenable to their task of evaluating the landscape.



Photo 6.1: Trails along the Nagacadan heritage cluster using the Bilong route
(Top right photo by: Marilyn Guimbatan, 2011 and bottom left photo by: Roy Adam, 2012)

Once at the venue, the monitoring team, along with all attendees, and volunteers were served lunch, following an opening prayer and welcome remarks (Photo 6.2). The community consultation followed lunch and the intermission numbers, presented by members of the Bayninan Farmers' Association, in which they performed a celebratory dance and a *hudhud*. Though 'community consultation' implies a dialogue with community members, whereby 'consultation' suggests the act of

treating residents as advisers, the discussion did not unfold in this manner. The monitoring team conveyed all that they had observed during their visits and communicated their concerns, which was then followed by a question-and-answer session. However, this question-and-answer session was not for the intent of eliciting alternative views and deliberating them; instead, the session was offered for the purpose of clarification.



Photo 6.2: Scenes from UNESCO Joint Reactive Monitoring Mission

Clockwise: Welcome signage; arrival of Joint Reactive Monitoring Mission team; consultation panel; police escort for monitoring team.

As the forum progressed, it became rather clear who was taking on the position of consultants, and which views were being propagated and expected to be enacted. A later final consultation was held in Banaue hotel and echoed the structure of the forum that unfolded in Nagacadan. Previously, I have discussed town forums in relation to the implementation of the Ambangal Mini-hydro Plant, in which discussions and negotiations arising from said forums, were entangled with the very procedures for which such consultations are part of. These town meetings in turn, reciprocally generated further procedures and future deliberations. Though it is clear that unequal weight is placed on the perspectives and principles that are being promoted in the UNESCO town forums, the community members' response during and after such proceedings demonstrate how these meetings are sites wherein collective experiments, "are drawn which opens up the fields of possibilities," (Callon, et al., 2009: 180).

One of the volunteers who assisted in preparations for the monitoring visit in

Kiangan is Jovel, who also participated in the monitoring programmes and consultation forums undertaken in Hungduan. Throughout the day, Jovel and Marlon were both expressing their frustrations over the heritage agencies' preoccupation with the visual aspect of the landscape. In particular, Jovel was relating UNESCO's opposition to the construction of cable cars across rice fields, particularly of a proposed tramline in Banaue. Although UNESCO was amenable to tramlines used for the sole purpose of moving goods, they were concerned of tramlines that transport people. While UNESCO cites a concern for safety regarding said tramlines, the most prominent reason offered for their opposition, is uneasiness over how such a mode of transportation would impact the panoramic view of the terraces.

Jovel recalled that at some point in the consultation, a member of the community commented that when people photograph the landscape, one can simply use Photoshop to digitally remove the sight of the tramlines from their pictures. This elicited a laugh from the group. His anecdote illustrates the facetious tone of how community members sometimes express their sentiments towards heritage conservation. During the final provincial-wide consultation that I attended in Banaue Hotel, the monitoring team commented that houses within the terraces with painted rooftops in jarring colours do not seamlessly blend with the landscape. An audience member responded by muttering, "Should we use green then, or maybe brown." Indeed, UNESCO has alternative reasons for their recommendations including pressing ecological and safety concerns regarding the construction of houses and infrastructure. Soil stability, erosion, waste management and the contamination of natural resources are among the litany of issues indicated by conservation agencies, hence their insistence on the conduct of environmental impact assessment for development projects. However, such reasonable considerations are lost in the dominant presence of concerns over the visual experience of the landscape.

In a report which documented the final provincial forum held in Banaue Hotel, the monitoring team's preoccupation with the visual is all the more glaring. Though I heard such issues brought up when I attended the forum, with their comments compiled in written form, it is even easier to notice how frequently the issue of views is alluded to and emphasised, especially in relation to infrastructure pro-

jects. Below are some observations specified by the monitoring team:

...mini-hydro power plants should be permitted as long as they are mini-hydro plants and positioned, as much as possible in natural depressions and/or places with *minimal visual impact* (United Nations Educational, Scientific and Cultural Organization/International Council on Monuments and Sites, 2011: 17).

An added challenge is the use of visually jarring colors on roofs covered with G.I. sheets, especially within the terraces. Not surprisingly, such houses are frequently *visually intrusive* in the landscape. If they are along the access roads, they can be seen from the terraces, and if they are within the terraces, they are especially prominent as one move through the landscape (22).

Recent tourism-related facilities are increasingly posing a major problem – *visual intrusion*, questionable land use and extension of facilities onto communal property (23, all emphasis my own).

Since reasons given for opposition towards a project inevitably returns to a discussion on its visual impact, arguments for or against a project are simplified to a concern on views, causing community members to interpret heritage conservation issues as a matter over aesthetics, resulting in frustrations. Community members often assert that the terraces were not created with views and beauty in mind or that they have no interest over how the terraces appear. A friend, Nilo, who at the time worked for the Governor's Office, once proclaimed, "One thing they (UNESCO) don't understand is that we don't care about the aesthetics, it just so happens that the terraces are beautiful, just by chance. But to us what's beautiful is something that's useful."

Though the Ifugao insist their indifference on the matter of the terraces beauty, they still do however allude to views when expressing disapproval over the state of the terraces, albeit with a different focus than that of conservation agencies and not at all defined by beauty. When traversing the landscape with Ifugao community members, man-made structures are rarely pointed out with disdain or disappointment or even brought to my attention. Instead, what often incites disapproving remarks are the state of the crops and fields. Community members' articulation of their visual experience and assessment of their environment is often tied to how

ecological issues are manifested in the appearance of the crops and fields, since such manifestations signal what harvest is to be expected.

The emphasis is on the state of the crops on the terraced rice fields, and not simply on the structures being constructed on the rice fields. I must note that ecological issues are also often discussed in conservation reports; however, they are not tied to views in the same way that conservation agencies often do so for construction projects. For Ifugaos, their discussion of views is dominated by their observations of the agro-ecosystem and the transformation of rice from seed to mature, robust panicles that will be ready to harvest. This transformation encapsulates the crop's potential to become the valued food stuff that contributes to the well-being of its cultivators, but also presents the possibility of unmet expectations when particular circumstances stifle the season's harvest. The crop's maturity likewise constitutes the knowledge and investments exercised for the planted seed to undergo maturation.

When walking along dikes, there were numerous times when a companion would point out eggs laid by destructive snails dwelling in the paddies, the yellowing of panicles due to a crop disease or loose, crumbly-textured terraced walls caused by water seepage. Even appreciation for their environment refers to the agricultural system. On hikes, people did stop to appreciate the view, and using borrowed terms (English, Ilocano or Tagalog), would comment on the landscape's 'beauty'. However, this appreciation is tied to the agricultural system at work and the process crops are undergoing, rather than a quality of being picturesque. Appreciation is conveyed with descriptions on the moment that crops reach synchronised maturity, the turning of the panicles from green to gold, which signal their ripeness for harvest.

While once overlooking the Hapao Terraces, a friend, Atan, who is an Eco-Tour coordinator, mentioned the rather apocryphal anecdote of the tourist who came all the way to Ifugao while the terraces were irrigated and proclaimed, "I spent all this money and all I got to see was mud." In Hirsch's analysis of the word landscape, he elaborated that the concept of landscape was introduced as a technical term for painters. As he pointed out, "The painterly origin of the landscape concept

is significant. What came to be seen as landscape was recognized as such because it reminded the viewer of a painted landscape, often of European origin” thus, the common expectation for rural landscapes to be picturesque (1995: 2). After his humorous retelling of the often recited anecdote, Atan commented that even when all the fields are flooded and muddy, one should appreciate that stage in the agricultural cycle, since the crops cannot be what they are, without first undergoing that necessary step of looking like mud.

Seeing as described above is not necessarily akin to a detached, omnipresent viewer as described in Foucault’s influential analysis on Bentham’s Panoptic and the architecture of prisons (1977: 200). Okely provides a useful critique on analyses that automatically take-for-granted Foucault’s connection of sight with detachment and surveillance (2001: 103). In her own ethnographic account of apple-farmers in Normandy, Okely recalls how community members often talk about particular stages of the agricultural cycle. Community members especially mention the experience of seeing the fields at apple blossom time. Okely illuminates, that for the residents whose life and work revolved around farming, it is through these visual experiences, that they can locate themselves in time and place; it is in seeing that one experiences the labour and transformation of “the viewed place” (2001: 106).

During a stay in Hungduan, I accompanied my Hungduan host-mom, Auntie Sabel, to a wedding. She lived in the town centre, and the wedding was in a village which could not be reached with a vehicle, thus necessitating a hike. Even if the village was reachable with a vehicle, the scarcity of tricycles operating in Hungduan would have caused us to walk regardless. On the way to the village, Auntie Sabel kept pointing out particular rice fields, saying, “What a shame,” or “That’s not good,” but sometimes, “Now this is good.” She was referring of course to the state of the crops, and as she indicated, some of the rice panicles were scraggy and shorter than others, signalling a bad harvest to come, while others were more robust. In some instances, she determined the state of the panicles from a distance, and then as we reached the particular field would show me in detail what she was referring to.

Actually, to use *maphod* on an object is not simply to describe the object itself, but as a compliment to the person whose skill is manifested by the object. The

state of the rice crops within the terraces are more likely to be described as *maphod* (good) or *adi maphod* (not good), instead of 'beautiful'. However, Auntie Sabel's comments were not a critique on the farmers' technique. If this was the case, an implied reference would have been made. Auntie Sabel instead, was pointing out perennial problems that farmers face. I admitted to Auntie Sabel that when I see the fields all I see is a wide expanse of green, they all look the same. Auntie Sabel took my admission with obviousness, as if she expected my inability to notice such nuances.

In his analysis on the concept of clarity in regards to the Zafimaniry's socio-spatial relations, Bloch notes that:

...by understanding the central value of clarity and what lies behind the enthusiasm for viewing panoramas which display clarity...we can share Zafimaniry ethical and aesthetical concepts about the landscape as well as understanding their equanimity towards the geographical changes occurring around them, whether these have been produced by them or not" (1995: 67).

As Bloch, explains, the topography of Zafimaniry country, which is wooded and mountainous, is often "shrouded in mists, rain and clouds" (66). As such, the landscape is uncaring, as a manifestation of God, it can, "affect people in ways beyond explanation" (1995: 67). It is through making lasting marks on their environment for which humans can then transcend their fragility, by becoming part of the immortal enduring landscape. The hardening materiality of wooden houses, erecting of stone mortuary monuments, the clearing of forests and cultivating of rice fields are marks on the landscape which are emblematic of pleasant living conditions, since such human activities arises in clarity and can be seen from having clear views.

Bloch's analysis provides a useful approach to understanding what underpins the act of viewing. In Ifugao, a window to grasping people's frustration and appreciation of their environment lies in the concept of *maphod* (good), which is used as an index of quality and value, as opposed to a perception framed by a notion of beauty. As previously mentioned, in using beautiful as a description, Ifugaos often

use the word *napintas*², which is a borrowed Ilocano term without a Tuwali equivalent. People often asserted that there is no such concept as beauty in Ifugao. This is often a source of complaint particularly when community members express their frustration over the preoccupation on the beauty of the terraces. The Tuwali word which expresses appreciation for the quality of something or someone is *maphod*. This term can describe something that can be aesthetically valued, though people always affirm that the word is not associated with aesthetics per se.

The fact that something is *maphod* and *napintas* is circumstantial, not automatic, since *maphod* and *napintas* are not interchangeable, nor are they complimentary. As I previously referred to, Barton also notes the lack of the word beauty in Tuwali in his early accounts of Ifugao society (1955). He traces the origins of the Ifugao's use of the borrowed word *napintas* to the Spanish word *pintado* (painted), which as Hirsh's analysis demonstrate, the word 'picturesque' in relation to landscape emerged from the vision of painted landscapes. However, the root word *pinta* in *napintas* can also be interpreted as deriving from the Spanish word *pinta* which relates to the look of a person or thing. Though, interestingly, the Spanish word *pinta* has no association with good or bad, and does not necessarily have to be connected with beauty. Thus, in a sense, even the borrowed word for 'beautiful', in effect, could also very well not mean 'beautiful', in the same way that though *maphod* may be used to describe something that is visually pleasing, this is not a precondition.

While perusing drums at a trade fair, I spotted a drum with an intricately carved wooden base, which I showed to my host-mom's friend, Auntie Tabs. When I asked Auntie Tabs if the drum is *maphod*, she proceeded to tap the drum and upon hearing its dull sound confirmed that the drum is *adi maphod* (not good). Auntie Tabs began tapping other drums and evaluating the quality of the sound emitted by the instrument. She called my attention to how unadorned drums with superior

² Barton also notes this in *The mythology of Ifugaos*, but he refers to the word *napintat*. In Tuwali, there is a habit to convert an 's' sound into 't'. Barton also does note that in Ifugao, the closest words which imply beauty are words that describe people. Indeed *madikit* is used for females, but this usually refers to the quality of the one's skin (unblemished, though not sure if it relates to fairness) and hair (long and shiny). For men *bullaki* indicates 'handsomeness' but the association for this is usually one with a strong body, so that *bullaki* is closer to the English word strapping, than it is to handsome.

acoustics were more expensive than the ornate drums with a dampened volume. Drums are after all valued for their sound, not for their carved wooden bases. *Maphod* is more associated with quality, of something or someone coming into their potential. Quality however cannot just be detected with sight, it is instead experiential. My host-mom often comments on the changing quality of the Ifugao *tapis* (skirt), noting that the current textiles have a very course texture. I asked if such textures mattered even if the skirts are completely identical, to which she simply replied, “Yes, because they won’t feel the same.”

Such multisensory judgments are extended to rice. The robustness of panicles, the tallness of stalks, and the way in which stalks barely touch each other on the field, are especially noticeable to community members, farmers or non-farmers alike. As Okely notes, with the agricultural communities of Normandy, what one can see in a landscape is what one can also, “savour as taste, smell, and feel with hand and mouth” (2001: 108). As grains, the sensorial aspect of rice is furthered; one can smell and see good-tasting rice, as good rice, particularly the *tinawon*, is often owed to the fluffiness and size of cooked grains, as well as to the aroma it emits, and the satisfaction it gives. For those that have access to *tinawon* fields, it is normally expressed that *tinawon* rice is more filling than high-yielding variety rice.

In her ethnography on malanggan, funerary sculptures, Küchler addresses how studies have overlooked the saliency of the malanggan’s destruction. In this case, the malanggan heralds “relationships of ownership that only come into existence with, and are dependent upon, the disappearance of the figure” (2002: 169). As Küchler suggests, this oversight is due to analysis that land is based on Western assumptions that prioritises sight as the basis of knowledge. In fact, because transmission of land was articulated visually in ways which escaped “western conception of landscapes,” the malanggan was simply understood as art, thus allowing for the endurance of an indigenous legal system “which remained veiled and operational into post-colonial times” (1993: 86). With the designation of the rice terraces, although not as art, but as heritage, the risk is the simplification of visual terms which frames how the terraces are experienced by Ifugaos. Yet, as Okely suggests, instead of de-

nouncing a focus on 'sight' and 'vision', we should instead further expand our analysis to probe how various forms of seeing relates to dissimilar ways of knowing.

The fissure between *maphod* and beauty is at the crux of the diversions on how the Ifugao Rice Terraces are viewed and what people expect from such fields. As my interlocutors expressed, the fact that the agro-eco system of the rice field translates into something very visual, and deemed beautiful at that, is circumstantial. In this case, a good field is a beautiful field, but it is valued for being good, not for being beautiful; for what good is a beautiful field which consists of bad harvests, in the same way that as Auntie Tabs impressed, what good is a drum with a beautiful base, if it sounds dull. For what qualifies as 'good', in relation to productive yields, is how the well-being of the field is entangled to the well-being of those who tend to them.

In her own study of the conversion of rice fields into bean gardens in Asipulo, Ifugao, McKay suggests that such transformations are people's aspirations materially grounded. The cultivation of these bean gardens signal and actualise people's opportunity to sell beans in the commercial markets, which in turn indicate the possibility for tenants to potentially buy rice fields in the future, thereby gaining a chance to elevate their status, by owning rice fields. Likewise, they allow for the possibility of sending relatives overseas, which again relate to prosperity. As such, as McKay explains, "the crops that are planted in Ifugao fields say volumes about how the people planting them envision themselves in relation to both the state and to global labour markets" (McKay, 2003: 306). Ironically, the state of the rice terraces, and the transformations it undergoes, can be seen in the nuances that Auntie Sabel has pointed out during our walk to the wedding, or the sociospatial relations McKay highlights– nuances that are likely to go unnoticed by the very same people who may value the terraces for being 'beautiful'.

MAPPING

As previously discussed, in Rheinberger's concept of experimental system he addresses that science research, consists of both: *epistemic things*, the object of in-

vestigation, which are question-generating and unstable, and *technical objects*, or the 'experimental condition' (1997: 29). *Technical objects* are the 'material and methods' which provide a framework for the reproduction of experiments (1997: 30). As Rheinberger elaborates, the two inextricable elements of an *experimental system* dynamically interact. It is this interplay between *epistemic things* and *technical object* that make experimental systems flexible and unstable. Rheinberger argues that:

...it is the hallmark of productive experimental systems that their differential reproduction leads to events that may induce major shifts in perspective within or even beyond their confines. In a way, they proceed by continually deconstructing their own perspective (1997: 36).

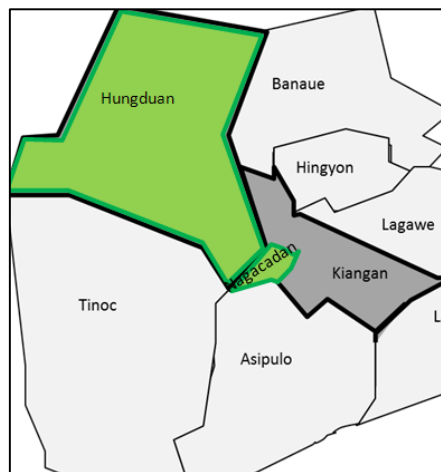
Using Rheinberger's ideas on experimental systems, I discuss the process of map-making as a particular type of investigation and proceduralisation. In this case the map, while being the subject of inquiry, is central to the very procedure for carrying out inquiries.

Through a discursive analysis of conservation practices Bryant demonstrates how conservation initiatives are, "simultaneously moral observations and agendas," and that, "there are various social and political implications that follow from the moralized basis of conservation" (2000: 677-678). To illustrate his argument, Bryant compares two approaches to conservation in Philippines. One approach is the Integrated Protected Areas System, the state's official conservation strategy focusing primarily on protecting biodiversity hotspots. An alternative strategy is the protection of indigenous communities' ancestral domain claims promoted by the National Commission on Indigenous Peoples. Interestingly, how such conservation principles are enacted, shape the delineation of spaces in ways that inform how initiatives should be implemented in these zones. As Bryant highlights:

While IPAS [Integrated Protected Areas System] emphasizes biogeographical criteria in border delineation, the ancestral initiative uses bio-cultural criteria reflecting local socionatural histories. The point here is not whether the borders are the same or not. Rather, it is to recognize that differing assumptions, logics and methodologies are involved in territorial marking (2000: 698).

This chapter details precisely the negotiations and tensions that arise from and in these differing envisioning and experience of the Ifugao landscape and what outcomes and potentials are expected from or generated by such visions.

Between Kiangnan and Hungduan, there is an obvious disparity in what constitutes as a core zone. The entire municipality of Hungduan is a heritage cluster, while only one village of Kiangnan is officially recognised as such (Map 6.1).³ Therefore, Kiangnan predominantly consists of buffer zones, areas where regulated construction and commercial development can occur with less scrutiny. On the other hand, since the entire municipality of Hungduan is a core zone, this limits the municipality's liberty to sequester areas of land to be developed beyond residential purposes or agricultural activities. This section highlights the inconsistencies involved in the designation of heritage clusters and how this relates to expectations implied in conservation efforts. As I have noted in previous chapters, the dissimilar development of infrastructure between Kiangnan and Hungduan, as a result of conservation efforts, implicates the well-being of community members.



Map 6.1: Kiangnan and Hungduan heritage clusters
Modified from map drafted by: Rachel Guimbatan (in SITMo, 2008: 17)

Equivocal perspectives have emerged from diverse views on what is to be

³ On the UNESCO World Heritage inscription, Nagacadan, Kiangnan is officially mentioned, however, it is implied that the nearby village of Julongan, Kiangnan is also part of Kiangnan's core zone, since it is the forests of Julongan that are the water catchment areas that provide the water, which irrigate the rice terraces.

expected from these buffer and core zones. Though community members' articulation of their visual experience may be tied to ecological matters concerning the field, this does not mean that they are indifferent to construction within terraces. As detailed in previous chapters regarding the implementation of the mini-hydro plant, community members seriously debate and negotiate over development projects, particularly ones that involve civil structures. However, issues regarding construction and development projects are often tied to moral values or agricultural activities rather than anxieties over visual impacts. Such reflections on how values are tied to sociospatial relations are also constituted in the act of mapping.

Among the observations made from the Joint Reactive Monitoring Mission, UNESCO and the International Council on Monuments and Sites specified the necessity of mapping the Ifugao Rice Terraces, thus making it a condition for the provincial government to map out the core and buffer zones. As stated in the report:

The process for mapping will entail: (1) Boundaries will be determined through the consensus of all parties...(2) Boundaries falling within private property will need the consent of the owner...(3) Boundary lines based on satellite imagery will be verified through groundwork; (4) After mapping the boundaries using GIS, LGUs [local government units] will be asked to confirm them; (5)...ordinances will be passed at all levels of government to ensure the maps become legal documents and the baselines for CBLUZPs [community-based land use and zoning plans]; and (6) CBLUZPs will be developed through community participation (UNESCO and ICOMOS, 2012b: 16).

As explained by the director of the Ifugao Cultural Heritage Office, a department within the Office of the Provincial Governor, the mapping of core and buffer zones has been long overdue; it was deemed as an oversight that can no longer be neglected:

Six years after we were inscribed, because of our non-compliance with some requirements, we were listed in the endangered list. They gave us at least 10 years to submit all the requirements...Unfortunately until 2011, nothing was done, nothing happened regarding these pending requirement. When we reviewed all the benchmarks and requirements we have to meet one of them is the mapping of these heritage sites.

Indeed, in the master plan previously mentioned, among the three major compo-

nents identified in the plan are: a 'bio-physical' component, which entails a community-based land use map, a physical planning and zoning program for the management of resources, and the regulation of development activities (Ifugao Provincial Government, 2004: 37).

In documenting the implementation of a buffer zone for the Chief Roi Mata's Domain, a World Heritage Site in Vanuatu, Trau et al critically examines how the theory and praxis of zoning within the context of heritage conservation is locally contextualised, resulting in contestations and ambiguities. As they suggest, buffering of resources is a common practice beyond the context of heritage conservation. However, the principles that presently underpin the concept of buffer zones in heritage conservation, was the product of a move towards linking conservation with development (Trau, et al., 2012). This ushered in community based initiatives from resource management, conservation and development. At the crux of the implementation of buffer zones is "that conservation and development are mutually interdependent" (ibid). They underscore that tensions regarding these buffer zones should not be simplified as an opposition between global versus united local conceptualisations of buffer zones. They argue instead, that at the heart of such contestations regarding zoning is that the "heterogeneity of local or Indigenous communities and the multiplicity of their ideas and interests sit uneasily within global imaginings of community-based heritage preservation" (Trau, et al., 2012: 13). In Ifugao, issues of boundaries along with diverse indigenous land-use practices all come into the foreground in the mapping of areas into core and buffer zones.

Based on UNESCO's request for cartographic documentation of the core and buffer areas, a forum was held in Banaue Hotel to host engineers from the Philippines' National Mapping and Resource Information Authority in September 2011. I attended the forum as a volunteer with Save the Ifugao Terraces Movement. Following the usual formalities of an opening prayer, along with the singing of the national and Ifugao anthem and welcoming remarks, representatives from the National Mapping and Resource Information Authority began their presentation to present an outline of their activities in Ifugao. Their presentation addressed: their task in mapping the landscape, what they hope to achieve, when they hope to complete the

mapping, and how they require the participation and assistance of local government units and community members. The central objective of their mapping project is to produce a topographical map of the core and buffer zones of the Ifugao Rice Terraces. At some point, one of the engineers admitted that they were slightly overwhelmed by the scope of the project since they underestimated the vastness of the areas to be mapped. Similarly, the topography of the areas to be mapped would present a particular challenge in the surveying of land.

After the project leaders of the mapping mission completed their presentation, audience members from each of the municipalities included in the heritage site were asked to discuss the parameters of their buffer zones. Since core zones are pre-determined as the heritage clusters, the deliberation primarily regarded which villages should be included in the buffer zones. Each of the municipalities formed huddles around the conference room to discuss their zoning plan (Photo 6.3). Following the discussion, community members presented their zoning maps elaborating on their rationale for their selected buffer zones. Since the entire municipality of Hungduan is a core zone, audience members from Hungduan reasoned that the buffer zones must include neighbouring municipalities such as Banaue, Hingyon, Kiangan and Tinoc, but also the province, Mountain Province. The governor had to intervene noting that since Mountain Province is another province, it is outside his jurisdiction and he therefore cannot influence development activities in the area.



Photo 6.3: Provincial mapping forum

Left to right: Community mapping amongst Hungduan residents; similar discussions amongst Kiangan residents

(Left photo by: Atan Martin, 2011 and right photo by: Tzar Catling, 2011)

The issue of boundaries is telling in the visualisation of the Ifugao Rice Ter-

rices. While the heritage clusters are more commonly known as the Ifugao Rice Terraces to Ifugaos, to many Filipinos, the clusters are referred to as Banaue Rice Terraces. My relatives in the Cagayan Valley and Manila, along with American expatriates and Manila cabdrivers will often talk to me about the Banaue Rice Terraces, in some cases mistaking Banaue as part of Baguio, or Kiangan as part of Banaue. This is not simply a matter of geographic knowledge, but of how people envision the extent of the rice terraces. Actually, the official UNESCO inscription labels the heritage site as the Rice Terraces of the Philippine Cordilleras. While other Cordillera provinces do indeed practice terraced, rice cultivation, the labelling of the Ifugao Rice Terraces as Rice Terraces of the Philippine Cordilleras is problematic and inappropriate.

Such a label does not take into account the context of Cordillera history. Independent settlements (sometimes in conflict) were subsumed and classified into *commandancias*, regional civil governments during Spanish colonisation – a categorisation which although revised, was extended during American colonisation (see Introduction). Even just within Kiangan, the village of Nagacadan (current site of the heritage clusters), during Spanish colonisation of Philippines, saw itself as separate, often in opposition Kiangan villages in lower elevation. Thus, the zoning of core and buffer zones neglects the nuances of the Cordillera region. In imagining a pan-Cordillera perception on the practice of terraced agriculture, rice terraces are perceived to be Cordillera-wide. However, the heritage site designation is not extended to other areas of the region; in fact, it is bounded only within the borders of Ifugao.

Even the parameters of the heritage clusters came into question. Some audience members began to comment on the inconsistency of the sites, referring of course to the expanse of the sites covered in Hungduan and Mayoyao, or the fact that though Julongan, Kiangan is considered a core zone, it is somehow not named in official reports which cite only Nagacadan as the heritage cluster. Confusion and criticism over the scope of heritage clusters are commonplace in Ifugao. Farmers in the lower villages who are aware of heritage activities often question why they are not included in the site, despite practicing terraced, wet-rice cultivation. During the meeting, the governor had to remind the audience that the mapping was not to nominate new sites or expand sites, but as a way to manage sites already inscribed.

Though, I must note that expansion of heritage boundaries, although rare, is permissible. In 2009, the expanse of Tubbataha Reefs Natural Park, another heritage site in Philippines, was increased (United Nations Educational, Scientific and Cultural Organization, 2009).

As an ancestral domain, the issue of boundaries is a potent one in Ifugao. Particularly so, since ancestral domain boundaries are not always in agreement with administrative boundaries. According to the Indigenous Peoples' Rights Act, Ifugaos can uphold their customary laws over national laws in regards to the settling of conflict. Thus, boundary disputes regarding ancestral lands are not settled in court with legal proceedings, but are often mediated by the National Commission of Indigenous Peoples. Once attending a boundary dispute settlement between two communities in Lagawe, I was confused when the two parties began mentioning two place names. I asked if the case involved two boundaries or two places, but in actuality there was only one boundary in question, but with two names, since one community refers to the place by one name and the other community uses a different name. This is not uncommon in Ifugao, especially in areas resided by more than one ethno-linguistic community. Yet, these contestations are part-and-parcel of how resources are renegotiated and reaffirmed (Harwell, 2011: 199). Though by focusing on how such contestations are grappled with, contradictions and conflicts are essential in communities' flexibility and adaptation. In this way approaches to sustainability should shift from equilibrium- to nonequilibrium-based views of society and the environment (Dove et al, 2011: 17).

In her study of resource claims in the Danau Sentarum Wildlife Reserve in West Kalimantan, Harewell suggests that competing views, rather than obliterating one another, actually "coexist, at times in conflict, at times in cooperation" (Harwell, 2011: 201). As she emphasises, how these resources are negotiated are continuous, their terms changing depending on conditions, so that communities are not defined by geography (ibid). As I mentioned earlier, in the case of Maggok, one can geographically belong to a municipality, but socially be tied to another. Maggok is often thought of as part of Kiangnan, despite the fact that it is actually within the administrative borders of Hungduan (see Chapter 5). Even Kiangnan residents have referred

to Maggok as being in Kiangnan. As admitted by the Mayor's executive assistant, she more instinctively thinks of Maggok as a village in Kiangnan.

During the National Mapping and Resource Information Authority forum, Kiangnan already came prepared with a previously completed community-based land use map. The map emerged from a Save the Ifugao Terraces Movement initiative, which was funded by a grant from the Philippines League of Corporate Foundation, as part of the foundation's corporate social responsibility initiative. The drafting of community-based land use plans began in the early 2000s, when the current Congressman Baguilat was then serving as the Ifugao Governor. Under his office, the core zones of each heritage cluster were mapped, which consisted of 40 *barangays* (villages). Rachel, who at the time worked for the Governor's Office, was heavily involved in the mapping of the heritage clusters, as she elaborated:

We were all excited about carrying out this project (mapping), but then Baguilat lost (the gubernatorial election), but we still wanted to continue the community-based land use plan. We did this for all the heritage sites, 40 barangays (villages). The first step was just mapping the sites, but it stopped there, planning and drafting policies would have been the next step, but then Baguilat lost...After that administration ended, it was actually Hapao (Hungduan) that was at the most advance stage, we already had some policies drafted, and Nagacadan was actually still in its early stages, but when Baguilat lost, we no longer had funds and had just some money from the League of Corporate Foundation, which was given to SITMo [Save the Ifugao Terraces Movement], so we decided to continue in Nagacadan because it's the easiest to finish, we didn't have to spend much for it.

The community-based land use plan drafted by the Nagacadan community is the foundation for the Barangay Ordinance No. 1, a land-use ordinance for the village of Nagacadan (Nagacadan Barangay Council, 2005).

My interlocutors in Nagacadan remarked that their community-based map and the resulting ordinance render a local practice to fit within national and transnational contexts. In this way, the act of mapping, institutionalised land use practices, but reciprocally, local practices informed the community-based map utilised in the enactment of the ordinance. The creation of the ordinance demonstrates not just how external contexts are adopted, but rather how they undergo a process of 'en-

dogenisation' (Leach, 2008: 12). This process refers to the culturally specific ways that people adapt and undertake external contexts. The ordinance which was a result of workshops and consultations with Nagacadan community members, outlines regulations for tourism and development, as well as demarcate core, buffer and multi-use zones (Nagacadan Barangay Council, 2005).

In her experience on working with the Nagacadan community, Rachel noted that the Ifugao's own land-use zoning was used as the basis of the community-based map. After all, as she asserts, the Ifugao agricultural system was based on the categorisation of zones based on land-use. Indeed, as I underscore throughout the thesis, land use planning and zoning is not novel to Ifugao, and in fact their management of natural resources and the agro-ecosystem of rice-cultivation depend on Ifugao practices of zoning (see Chapter 3). The act of rendering their practices in two-dimensional form through maps and ordinances, become a means to engage with central authorities, and external institutions and organisations. As Brightman points out, in his own account of the Trio's engagement with conservation efforts in Suriname, the Trio's adoption of mapping should not be seen as a threat to the Trio cosmology and practices. Rather, the Trio's active role in the governance of conservation and development initiatives, may involve adopting methods of monitoring, data collection and policing (Brightman, 2012: 564).

While Nagacadan has garnered the praise of the monitoring mission representatives, other heritage clusters challenge assumptions that zoning practices are homogenous throughout Ifugao. In Lambrecht's description of Ifugao villages in the 1920s, he too observed the classifications of land and the way villages accommodate the topography, wherein the zoning of land is arranged in relation to altitude, consisting of a village with upper, middle and lower parts (Lambrecht, 1929: 123; Save the Ifugao Terraces Movement, 2008: 19-20). However, the classification of land is not consistent throughout the municipalities, especially amongst the various ethno-linguistic groups. These inconsistencies in land-use classifications are implicated in the mapping of core and buffer zones. In many Ifugao villages, houses are near but not within rice terraces, as highlighted by Lambrecht's own observations of Ifugao villages. However, as Lambrecht points out, the topography of Mayoyao necessitated

the building of houses within terraces. As he describes:

The valley of Mayawyaw [sic] is a very broad one surrounded by steep mountains on which very few houses can be constructed, unless very distant declivities be selected. But this latter step would take the people away from their rice fields. Hence, the natives put their houses in the middle of their fields (1929: 118).

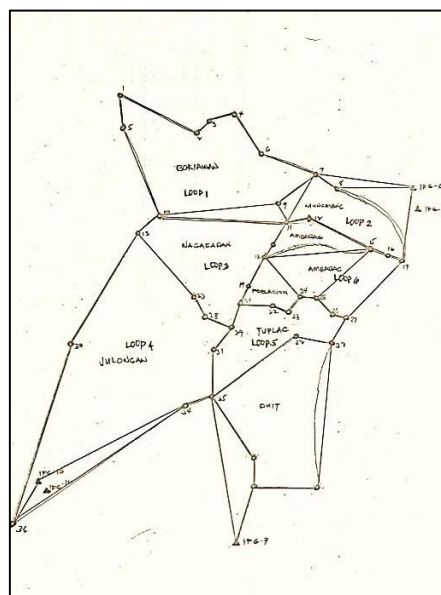
The practice of houses within terraces has been questioned by conservation agencies, particularly the size of houses being constructed. Interestingly, however, the practice of houses being built within terraces is often inferred as a new practice, rather than a continued one.

As the case in Mayoyao demonstrates, the cultural variances in the organisation of settlements must be acknowledged properly. Settlements are not solely about the location of houses, but are in fact inextricable to attitudes regarding allowable behaviour and activities in relation to the tenets of Ifugaos. While the location of house settlements was challenged by the monitoring mission, they encouraged the promotion of churches as part of Ifugao heritage. Ironically, such churches are newer developments than the practice of dispersed houses within the landscape (Mayoyao). As suggested in the Monitoring Mission forum at Banaue Hotel, particular churches, even those built within the rice terrace clusters, as in Hungduan should in fact be highlighted in tourist paraphernalia, particularly maps. According to the monitoring mission, churches are an integral aspect of Ifugao history and transformations and a crucial aspect of the historical engagements between Ifugaos and missionaries.

To return to Winichakul's (1994) analysis the classification and designation of spaces as heritage clusters demonstrate the way in which a map not only is a projection of particular perspectives, but also becomes the very means for how such projections are realised. In this case maps form a closed loop in which maps are affected by the very effects they cause. Core and buffer zones, or marked tourist sites, do not objectively articulate a particular spatial relationship. Instead, mapping provides the means by which specific experiences can be enacted. In this case, the mapping of core and buffer zones is deemed necessary for conservation and develop-

ment efforts. Though, it is important to note that in the first place, the very act of mapping zones was in itself a result of the enactment of conservation efforts.

After the National Mapping and Resource Information Authority forum in Banaue, it was decided that Kiangan would be mapped first, since the municipality already possessed an established community-based map. The engineers of the mapping agency organised a meeting in Kiangan with the involved *barangay* captains (village head councilmember) to discuss how the mapping of the buffer and core zones should transpire. The initial step was to identify the *mohon* (monuments) of the concerned villages, so each of the *barangay* captains indicated the position and location of the *mohon*. The Tagalog word *mohon* usually refers to large concrete masses that mark administrative boundaries between villages, but also boundaries between private properties. They are usually embedded on the ground. The word is sometimes translated in English as ‘monuments’ and some of my interlocutors did in fact use the word ‘monument’ instead of *mohon*. As such, I sometimes refer to boundary markers as ‘monuments’. It is next to these ‘monuments’ where GPS stations were placed for the surveying of land. Routes had to be determined to decide how to map-out these points. Different boundary points were divided into loops, with each day dedicated to mapping one to two loops (Map 6.2).



Map 6.2: Surveying route for mapping Kiangan

In coordinating the logistics of reaching these 'monuments', questions on transportation and length of travel began to surface from the mapping team. The conversations that such questions incited demonstrated that the team was facing a logistical challenge of having to hike the trails with equipment in tow. To the Ifugaos, such a task is banal, since the challenge of hiking while towing loads is faced regularly. The team was scheduled to map out their first loop in Bokiawan the next day, and that morning, they gathered around the local hostel. It was raining, though not heavily; however, there was a typhoon warning for that day, and the clouds were heavy and ominous, while the wind was gathering strength and speed. It was decided that instead of heading to Bokiawan, the team would map out the lower villages of Ambabag and Poblacion, as hiking to Bokiawan may pose considerable danger. By late-morning, the rain transformed into the destructive Typhoon Pedring, which caused power outages for two weeks, disrupted phone reception for a week, and destroyed a bridge connecting Kiangnan to the route towards Banaue and Hungduan, in this case, the other heritage clusters. In fact, the team was marooned in Kiangnan for some time, thus delaying their schedule. To make matters worse, Typhoon Pedring was immediately followed by another typhoon and certain loops to be mapped became riddled with landslides, making travelling to such areas precarious. Such issues had to be logistically accommodated. The team was scheduled to stay in Kiangnan for a few days, which turned into more than a week.

In discussing conservation initiatives regarding mapping, Baxstrom's analysis of large-scale institutional plans in Malaysia, along with a leisure park plan in the Brickfields area of Kuala Lumpur, provides useful insights on what a plan does. As Baxstrom elaborates, conceptualising a plan, "as a virtual object, as an image of thought that exists as an object and that subsequently provides the grounds for a range of acts and outcomes over time, and particularly in the present" (Baxstrom, 2011: 65). Baxstrom notes that while plans are mechanisms of power they do not, "eradicate multiplicity or complexity" (Baxstrom, 2011: 71). In the range of actions and complexities engendered by and embedded in plans, "projected future outcome exists in such plans only as a formal gesture to the ideal of 'the plan' itself; in reality,

the plan only effectively functions as a variable in the present” (Baxstrom, 2011: 63). In the conservation of the Ifugao Rice Terraces, to map was to plan since the map engenders particular engagements in the present while signalling prospective actions in the future. The pursuit of mapping the core zones and buffer zones was in fact, for the purpose of using such maps in future municipal development plans, so that the state of terraces are considered in the building of infrastructure or the promotion of touristic activities. However, the significance of mapping is not on what specific future outcomes they bring about; rather, the act of mapping engenders and is embedded in a multiplicity of engagements amongst varying actors.

PRESENTING

Several weeks after the mapping team’s mission to Kiangnan, I was in Banaue for a forum on indigenous educational curriculum, where I encountered one of the team’s project leaders. The team was enjoying a rare free day after having spent some days mapping the core and buffer zones of Banaue. I asked the project leader about the team’s experience, and she recalled all the difficulty of traversing the trails and of locating the *mohon* (boundary markers). She put great emphasis on the adventurous nature of this particular mapping mission. At one point, she commented how beneficial it was that most of the team members were young, still agile and energetic, since there were times when the whole day was spent hiking. The team completed their task within the suggested deadline, and a few months after, in February, they presented the province with the map of the heritage core and buffer zones.

Interestingly, on a municipal level, not much communication transpired, between the moment in which the actual mapping took place and the presentation of the maps to the provincial government. Throughout the mapping of the zones, consultations and workshops greatly involved community members, often working alongside and guiding engineers along the terrain, providing their own advice based on their knowledge of the community and the landscape. However, the act of mapping terrains was divorced from the actual act of drafting the map. After coordinates

were acquired, surveyors returned to Manila in order to draft the maps, whilst communicating their progress with the provincial government. From time to time, I visited the mayor's office asking for any news on the map, and the personnel would have little information to share on the progress of the outcome from the mapping excursions. It was not until months later, and through an official announcement, that Ifugaos were informed of the finished map to be presented to the governor at a ceremony in Banaue hotel, where the initial community forum was held, and where many official ceremonies and consultations regarding the Ifugao Rice Terraces are hosted.

In February 2012, the ceremony did indeed take place in Banaue Hotel. Though I was not able to attend the presentation, friends who attended recounted the event and the ceremony was covered on local newspapers. Photos from the event show community members being presented with large colour copies of the map drafted by the National Mapping and Resource Information Authority. Quoting Dr. Virginia A. Miralao, Secretary General of UNESCO National Commission (UNACOM) of the Philippines and (former) Governor Eugene Balitang, the maps are described as guidelines for future development projects, wherein certain restrictions will be followed. Projects to be regulated include, "the building of medium to high- rise structures, putting up of cellular phone sites, public transportation routes, and even the construction of farm-to market-roads" (Corpuz, 2012: 2). Actually, more recently, in August 2014, The Department of Public Works and Highways (DPWH) suspended road-widening projects in the municipalities of Kiangan, Banaue and Hungduan due to the reported damages they have been causing to the terraces (Cabreza, 2014).

The maps presented to the community during the ceremony were eventually kept by the provincial government, in the same manner that the Master Plan is also stored in the Ifugao Cultural Heritage Office in the Provincial Capitol.⁴ The maps and the Master Plan do not feature in the everyday life of Ifugaos, nor are many Ifugaos even aware of these documents. Although, I must note that such documents are

⁴ The provincial hall, housing provincial government offices and where the provincial council meets

readily available for the public, a point I return to later. Yet, these maps, along with the Master Plan, embody the dynamic engagements between varying human and non-human actors. Likewise, the very process of mapping and viewing rendered in paper form, are the point of reference and means which engender such engagements. It is in their paper formation that such maps can be ceremonially recognised. Electronic versions of these maps exist, and it is in this form that I have possession of these maps, yet their PDF version does not engender the same relations.

Several months after the mapping mission and weeks after I left Ifugao Province, the Ifugao Rice Terraces was officially removed from the endangered list, while maintaining their heritage status. As stated by UNESCO:

On 31 January 2012, the State Party submitted a report on the state of conservation of the property, providing details on the progress attained to achieve the Desired state of conservation for the removal of the property from the List of World Heritage in Danger (Decision 34 COM 7A.26) through implementing the corrective measures, while also responding to the recommendations of the March 2011 and previous reactive monitoring missions (2012b: 65)

Among the corrective measures indicated as having been satisfied is the matter of community-based maps, in which:

In the framework of the Retrospective Inventory the cartographic documentation, delineating the property and its buffer zone has been prepared in close collaboration with all stakeholders and submitted to the World Heritage Centre... The World Heritage Centre and the Advisory Bodies consider that the necessary steps have been taken to develop the community-based land-use and zoning plans, although this requirement has not been fully achieved (2012b: 66-67).

Far from being representations of core and buffer zones, such maps embody the very processes of the creation and maintenance of these zones, along with the messy relations entangled in conservation and development activities. Similarly, they visualise expectations for the future.

When I was still residing in Kiangnan, I attended a tourism forum held on the grounds of the Ifugao Museum. The forum featured discussions over how community-based map could factor in the measuring of Nagacadan's carrying capacity for tourism activities. In this case, carrying capacity is a measurement of the extent of

visitors a site can tolerate without severely disrupting the ecological system or social relationships amongst community members. On a larger scale, the province as a whole, often refer to how the map may be useful in the undertaking development projects with consideration to the agricultural heritage of the region. The mapping of the Ifugao Rice Terraces illuminates the salient issue of scales, especially in regards to 'generalizations' (Tsing, 2005: 89). The delineation of core and buffer zones are practiced as models for land use and development planning, especially for designated heritage areas. The mapping and monitoring of heritage clusters likewise shapes how heritage management is enacted, and the culturally specific, nuanced engagements that emerge in and from them. However, the creation of core and buffer zones and the representation of these on a map, does not take into account this heterogeneity.

In his ethnography on an Amazonian community's relationship within and with their environment, Gow provides analysis on a specific official text regarding communities of Bajo Urubamba, Peru. The *Comunidad Nativa de Santa Clara* (1995: 56) is a land title which comprises of both map and text, and as Gow illuminates, the map has no importance for the use of orientation or locating one's self in space. Instead, as Gow explains, the saliency of the map lies in that it has become "a physical reference point" in land disputes between communities of Santa Clara and their neighbours (Gow, 1995: 57). Gow draws out that the map, which is held by the Ministry of Agriculture in Lima, "is the direct physical embodiment of someone else. This someone else, unknown to the people of Santa Clara and to myself, is the one who embodied the laws of the Peruvian State" (1995: 59). As a representation of a space and certain principles regarding claims and access to that particular space, the title has the capacity to be the very way in which said principles are enacted. As Gow articulates, "We imagine such pieces of paper to embody abstract principles...but they can only do so because they *are* pieces of paper" (ibid).

Mitchell likewise, provides a reflection on the materiality of maps. As he details, in the mapping of Egypt, the calculation between the map and plots of land proved to be challenging when the shrinkage of paper is taken into account. Adding to the challenge is the measure of plots that were irregular, on a rectangular paper.

Owing to such difficulties, a technique of surveying was introduced (2002: 114). As discussed in the previous chapter, documents go beyond being representations, and as suggested in Brenneis's and Harper's analysis on the biography of documents, the materiality of documents as pieces of paper gives them potency. In fact, while official provincial documents such as the maps and the conservation Master Plan are readily available, this access requires a different engagement than access to electronic files, as in my experience with the core and buffer zone maps. Actually, access to hard copies of such documents requires asking for permission and signing a log-book documenting one's possession of the official documents. The ease or challenge in receiving this permission relies on the navigation of one's relationship with particular office personnel.

The saliency of maps, particularly stored maps, such as the *Comunidad Nativa de Santa Clara* Gow refers to, and the zoning maps I discuss here, is that as part of an 'experimental system', they allow for deconstructions and major shifts (Rheinberger's, 1997: 36). They are not simply representations, but are in fact crucial to and shape the very conditions for which they exist. In their ability to be corrected and to correct, they become potent sites of negotiations. Latour introduced the term *inscriptions* or *immutable mobile* to describe documents, such as maps, reports and archives. They are immutable and mobile in that they allow for displacement through transformations, all the while maintaining some relations untouched (1999; 2005). With *immutable mobiles*, errors and corrections are reproduced and widely circulated without changes, "counterexamples can be added to old texts and, in turn, are spread without modification to all other settings where this process of comparison may be resumed" (Latour, 1986: 12). Yet, it must be noted that there are stakes and consequences to corrections and counterexamples.

Maps do not simply represent or allow for a particular visualisation; rather, in their incompleteness, maps lend themselves to how differing visualisations are modified, debated and obscured. The map then, is not simply a representation of reality, but becomes the reference for a particular reality to be actualised. Mitchell's insightful contribution to an analysis on the technology of mapping is that, reality cannot be kept out of a map, since distances drafted on paper become, "a distance

‘on the ground’...one that will not stay still” (2002: 116). Mitchell argues that the reality ‘out there’ is implicated and encapsulated in the map-making process, since maps, just as borders, become the sites of boundary disputes (118-119). As Turnbull astutely points out in his study of cartography, in effect, the map *is* the territory” even if “paradoxically the territory *is not* a map” (1989: 61).

I do not particularly know how the core and buffer zone maps will be utilised, especially at a moment when, no longer listed as endangered sites, the preoccupation with conservation could lessen. Though as previously mentioned, already the widening of a road is being scrutinised and restricted. As debates over current road building projects show, rather than stabilising conditions, maps actually become avenues for destabilisations. All the while, in the very ambiguities that maps generate, they are likewise required, implicated and transformed. Significantly, as I point out in this chapter, the potentialities of these maps encapsulate and enliven the potential of touristic, agriculture and residential activities in Ifugao Province. These activities are constituted in the adaption of terrace management practices and deliberation over them. Community members grapple with the social and environmental transformations occurring in their region and how to adapt in ways that take into consideration Ifugao across generations. Integral to how such issues are reflected upon is a concern for how dynamic local concepts and practices can allow for improvements in the state of the province and the living conditions of its residents.

CONCLUSION

During my last week in Kiangnan, as my fieldwork was ending and I was preparing to return to London, I was able to experience another cycle of town fiestas, when the whole province is preoccupied with parades, games, pageants and community feasts. Yet, in the background of the summer celebrations, there were particular developing matters in Kiangnan and across Ifugao. At the time, the state of the Ifugao Rice Terraces as a World Heritage Site was still being considered, the National Commission of Indigenous Peoples was reviewing their Free and Prior Informed Consent form and the Ambangal Mini-hydro Plant Project Committee was in the midst of reviewing what project to fund with the Ifugao Rice Terraces Fund. Days before I left Kiangnan, a *dang-a* (voluntary community work) transpired in Nagacadan for collecting timber that will be utilised in the future construction of a Community Learning Center. The Community Learning Center is to serve as a community-managed, non-formal educational facility for the transmission of Ifugao traditions (i.e. dance, wood carving, house construction, rice production, etc). Such developing matters were emblematic of how communities are engaging with transformations that concern stewardship and prosperity.

Throughout the thesis I have focused on communities' engagement with social and environmental transformations and the processes undertaken for the expansion of capacities. In reflecting on such engagements, I have drawn largely from studies on potentiality and resilience. Such discussions have been useful in my attempt to further anthropological approaches to the study of sustainability. I have especially considered how people manage and maintain social and environmental resources for the well-being of kin across generations. As the thesis argues, to community members, well-being is not a fixed or steadfast goal. Instead, a concern for well-being is an expansion of adaptive capacities. In elaborating on Ifugao notions and practices of sustainability, I argue that Ifugaos are concerned with the stimulation of possibilities rather than the upholding of stability. For Ifugaos, the management of social and natural resources for availability to present and future generations is a process that hinges on one's ability to autonomously negotiate changing

circumstances. It is for this reason that I refer to Ifugao's conceptualisation and practices of sustainability as 'capacity-expansion'.

By drawing from notions on potentiality and resilience I highlight issues regarding the temporality and spatiality of sustainable development. In this way, I extend anthropological analysis on essential issues constituted in conceptualisations and practices of sustainability: the management, maintenance and availability of resources across generations. Since a study on sustainability concerns social and environmental transformations, a notion of potentiality as emergence, plasticity and modification is relevant to understanding processes of becoming, and the way these are articulated and embodied (Taussig et al, 2013). As I emphasised in the thesis, the temporal aspect of sustainability is not restricted to the relationship between the present and the future in a forward-looking, linear timeline. Rather, as previous approaches to potentiality and resilience enlighten, adaptive capacities entangles various timelines and scales of time (Holling, 1973; Novellino, 2007; Boyd and Folke, 2012; Helmreich, 2013). On the other hand, by focusing on the governance of resources, this thesis also reflects on the expectations and aspirations tied to sustainable development, and it acknowledges inequities in potentiality and resilience. As the experiences and expressions of my interlocutors demonstrate, the expansion of capacities is negotiated and maintained. In various chapters, I likewise elaborate upon how access to social and natural resources, one's 'social capital' (Bourdieu, 2002[1986]) or 'capacity to aspire' (Appadurai, 2004) are not enduring and stable.

As I have noted in my introduction, the questions I consider in this thesis include: How does one assess sustainability, when such a process involves an ambiguous amount of time? What is to be sustained and for whom? Whose responsibility is it? Who decides the criteria for sustainability and how does one do so? I must assert that the aim of the thesis is not to resolve and definitively provide an answer to such questions. Instead, my aim has been to apprehend the contexts of dynamic discourses and engagements that emerge as actors with ambiguous and varying positionalities grapple with such questions. It is for this reason that this thesis underscores the significance of deliberations and negotiations.

From the start of the thesis I expressed that rather than simply identifying sustainable Ifugao practices or translating an Ifugao concept equivalent to sustainability, this thesis reflects instead, on local frameworks that addresses the issues implicated in sustainable development. Such issues, as I have detailed in the previous chapters, concerns autonomy, access and management of resources and mobility as they relate to the well-being of Ifugao community members across generations. Understanding what processes are involved in how people expand their capacities has been the focus of the chapters in the first half of the thesis. Such chapters detail Ifugao kinship, funerary practices and agricultural activities and contextualise what is at stake in heritage and development interventions in the province.

In Chapter one, I discussed the relationship between the house and the field, settlement and mobility as they relate to kinship and the work undertaken for rice cultivation. I especially focused on the role rice plays in issues regarding social differentiation and the Ifugao's concern for autonomy and solidarity. Taking a cue from anthropological approaches that highlight mobility in kinship relations (Rosaldo, 1980; Retsikas, 2012; Allerton, 2013) I suggest in the chapter that paths are not only integral to, but likewise shape the maintenance of kinship ties and the work undertaken for rice cultivation. I elaborated upon this issue through my analysis of mobility as it relates to primogeniture inheritance, and the flexibility of Ifugao residence which allowed younger siblings to seek out access to productive fields elsewhere.

As people move, kinship ties are expanded, allowing access to labour and resources from one's co-villagers and kin in other villages. Accordingly, the expanse of rice fields is also extended as people move to other locales in hopes of clearing land for rice cultivation. Through access to labour and resources, while the Ifugao may persistently face instantaneous and sometimes cataclysmic challenges, people have confidence in long-standing cycles, through the establishment and maintenance of kinship ties. However, as I suggest in the first chapter and the two subsequent ones on well-being and agriculture respectively, the maintenance of kinship ties should not be disentangled from change. Instead, the expansion of kinship ties actually relies on and necessitates mutability.

Chapter 2 extends the previous chapter's discussion on kinship by reflecting on the centrality of kin relations in Ifugao concepts of well-being and how this is constituted in funerals and prayer services. I especially focus on issues regarding Christianisation and changing notions about class and status. Considering the undertaking of funerals and prayer services demonstrate how the Ifugao's concern for well-being reflects upon how the living negotiate their kinship ties with the dead, as descendants become different spiritual subjects than that of their ancestors. Such negotiations illuminate how Ifugaos, in the process of expanding kinship ties, broaden their spiritual networks. Both the dead and the living are thus implicated in the reciprocal care that kin give each other. I especially reflect on how kin relations are constituted in people's changing subjectivities and its significance to the broadening of kinship ties in consideration of kin's mobility across spaces and their transition from earthly to other-worldly realms.

While Chapter 2 focuses on the ongoing practice of Ifugao well-being rituals despite people's membership in Catholic parishes, Chapter 3 focuses on the labour and investments essential to the cultivation of rice. As I note in the chapter, previous agricultural activities required labour and investments beyond the field through the carrying out of rituals. Presently, the reconfiguration and revival of agricultural activities further extends work beyond the field as they are reworked as touristic or community events. This chapter additionally introduces local zoning practices that are implicated in heritage conservation discourses. An account of local zoning practices, situated within a historical context of rice cultivation in Ifugao reveals the assumptions regarding concerns over the state of the Ifugao Rice Terraces.

In exploring the entangled potentiality of people, rice and land, I detail various practices of sustainability. Throughout the thesis, I especially focus on potentiality as it relates to work for the dead in regards to funerary rites, and the work for rice, in regards to agricultural practices. I thus place in the forefront the following matters: spatial relations, temporality and materiality and their significance to understanding how natural and social resources are sustained for the well-being of kin across generations. The connection between people, land and rice in Ifugao addresses the matter of mobility in relation to the importance of kinship in Ifugao con-

cepts of well-being. As I underscore in the thesis, the constitution of the Ifugao landscape in kin relations encapsulate the mutual being and becoming of people and places (Leach, 2003; Sahlins, 2013). Since such places constitute diverse expectations, aspirations and perspectives in regards to the well-being of people across generations, I note that they are fertile grounds for contestation and negotiations.

Particularly in regards to well-being rites, I consider how mobility in kinship relations does not simply concern engagements between living kin. Thus, the thesis considers mobility as it relates to both earthly and otherworldly realms. In doing so, I demonstrate the need to address the role of spiritual activities to discussions on potentiality and resilience as they relate to sustainability. Moreover, in Ifugao concepts of well-being, various timescales and timelines are implicated in people's concern for the well-being of kin across generations and immediate and long-term management of key natural and social resources. This consideration allows for a discussion that situates spiritual activities within the context of heritage and development discourse. In fact, in discussions about Christianisation, healing rites and the changing materiality of rice, my aim in the thesis has been to reconsider the presuppositions that plague discourses regarding resource governance. Throughout the thesis I make the case that local understandings and enactment of sustainability profoundly contributes in our reconsideration of the identification of stakeholders and what is involved in communities' adaptive capacities.

The Ifugao's articulation and practices of sustainability that are featured in the first three chapters necessitated the reflection on the assumptions underlying sustainable development projects, which I elaborate upon in Chapters 4-6. Especially throughout the second half of the thesis, I have considered the often promoted practice of co-management that is referred to as 'capacity-building' in sustainable development and conservation interventions. While the first three chapters focuses on Ifugao cosmology, the last three chapters more explicitly discusses local understandings of sustainability in contrast to the categorisation and management of heritage terrace clusters and development projects. In this way, I extend previous anthropological critiques on participatory development (White, 1996; Cooke and Kothari, 2001; Hall et al, 2011) by explicitly acknowledging how actors situate the con-

text of development interventions within local frameworks. In the second half of the thesis, I have argued that as people contend with what practices to sustain and how to do so, the process not only involves debates regarding the adaption of exogenous frameworks. Just as significant, community members actively scrutinise external contexts enacted and challenge the way Ifugao contexts may become obfuscated in conservation and development interventions.

The last three chapters address the necessity of deliberations as communities grapple with what to sustain and how. In these chapters, I continue to address the inextricable potentiality of humans and non-humans and the engagements and relations this implicates. I especially discuss the idea of potentiality as mutability and emergence in regards to the connected mobility of people and water in the practice of rice cultivation and the operation and maintenance of infrastructures. In discussing water, I acknowledge the saliency of water in both Ifugao cosmology and conservation and development initiatives. This has required tackling the innumerable possibilities that arises in the variability of water and what it allows and prohibit (Hastrup: 2013: 60).

The focus on water markedly attends to the vitality of the substance in associations between “spiritual, social and physical well-being” and thus, “provides powerful metaphors about human identity” (Strang, 2008: 124). The thesis therefore, responds to the call for exploring how the social constructions and materiality of water are inextricably intertwined (Orlove and Catton, 2010: 403). It is for this reason that this thesis has recognised how water encapsulates various world views and practices. Therefore, in the analyses that have been presented, I treat water as a socio-political issue (Strang, 2009: 5). As previous authors have emphasised, a discussion on water contributes to understanding the processes communities undertake in managing a vital resource so integral to the expansion of capacities.

By drawing attention to discrepancies and contestations, I respond to the suggestions of previous studies that call for a shift away from a preoccupation with harmony and equilibrium in approaches to social and ecological resilience (Berkhout et al, 2003; Nelson et al., 2007; Walker and Salt, 2006; Leach, 2008; Dove et al, 2011). For this reason, Chapter 4 focuses on issues regarding trust and access as

they emerged from community forums at various stages in the implementation of the mini-hydro plant initiative. This chapter provides a critique on the concept of 'stakeholder' as I compare capacity-building exercises to local consultation practices that I elaborated upon in the first three chapters. Debates over the construction of the Ambangal Mini-hydro Plant specifically clarify the sociospatial relations constituted in the management of family property, including rice fields, forests and trees. The Ifugao's idea about stewardship as both a recognition of the past and present generations likewise illuminate local articulations and practices of sustainability and how this guides people's engagement with current development projects. As I argued in the thesis, the present and future-oriented notion of sustainability that underpins sustainable development does not adequately recognise local, temporal understandings of sustainability which acknowledges a multiplicity of timelines and timescales.

Meanwhile, Chapter 5 and Chapter 6 especially feature a discussion on the zoning and management of heritage clusters. It is in these chapters that I present local critiques on development and conservation interventions. These two chapters address the dilemma in studies of sustainability, regarding whose criteria of sustainability should be met when differing perspectives and their enactment have implications. Understanding how varying actors engage with this dilemma is particularly important if an anthropology of sustainability aims to address social equity.

Engaging in discussions regarding differing visualisations require, as I point out in Chapter 5, a consideration of 'effects' and 'non-effects' in regards to the Ambangal Mini-hydro Plant and a similar initiative that never came into fruition in Hungduan. I have framed my reflection on the following matter by relating anthropological ideas about absence to my own analysis on potentiality. In consideration of local zoning practices that I discuss in a previous chapter regarding rice-cultivation, it is in this chapter, where I examine the designation and zoning of heritage clusters. I especially make the connection between zoning and the distribution of electricity, particularly the implementation of small-scale hydropower initiatives in Kiangnan and Hungduan.

In highlighting my interlocutors' engagement with small-scale energy initia-

tives, I have presented articulations regarding stewardship and autonomy as local conceptualisation of sustainability. In doing so, I present local critiques on the enactment of particular views on the development of the province that is tied to heritage conservation. In this chapter, I addressed the connection between the capacities of people with the capacity of space, whereby the regulation of spaces and restrictions in them, as my interlocutors see them, are regulations on people's capacity to play an active role in decision-making process, when opportunities for debates are truncated. On the other hand, such regulations and restrictions have also become a means to form new alliances or to elicit attention towards community members' own vision for improving the state of their province.

Chapter 6 further extends local critiques on heritage management that has been referred to in Chapter 5, via an analysis on the mapping and monitoring of the Ifugao Rice Terraces. Though in Chapter 6, I primarily focus not only in how community members critique the enactment of specific perspectives. Moreover, I detail how people are in fact scrutinising the assumptions underlying conservation and heritage interventions. As I present in the chapter, community members situate external frameworks within the context of their own local concepts. This is especially manifested in the Ifugao's concept of 'good' in relation to their critique on the association of 'beauty' to the rice terraces.

These differing visualisations have actual bearing on the ground, since they frame various actors' expectations from the rice terraces. For my interlocutors in particular, differing expectations regarding the rice terraces are inextricable to people's aspirations for the state of living conditions in the Ifugao. Such aspirations particularly concern the well-being of Ifugao youth. As my interlocutors express, as they work to expand avenues to opportunities and resources, the idea of sustainable development seems one-sided, concerned mainly in conservation that preserves the past rather than consider the future.

By elaborating upon Ifugao processes I refer to as 'capacity-expansion', in relation to capacity-building exercises as promoted in sustainable development projects, I draw out epistemological pitfalls in the study of sustainability. Particularly, I underscore a short-sightedness in the separation of religion and development dis-

courses in different anthropological discussions. As Bornstein notes, this separation in bodies of anthropological literature is a “product of our own episteme,” which assumes development interventions as secular (2003: 172). In reality, to my interlocutors, religion (whether Ifugao or Christian) was not dismissed from people’s encounter with development. In fact, in disentangling such anthropological concerns, there is a risk of missing out on theoretical discussions that could enhance an anthropological understanding of sustainability.

The work of Bornstein (2003) in fact, explicitly calls for more attention to the role of religious conversions in people’s encounter with development. Throughout the thesis, I have also referred to the work of scholars who, though not explicitly undertaking a study on sustainability, provide insights to a study of continuity and change that is relevant to our understanding of sustainability. I especially highlighted discussions which have emerged from anthropological studies of Christianity. When situated within the context of development discourse, studies on Christianity and religious conversion that grapple with debates on continuity and change (Keane, 2007; Robbins, 2007; Allerton, 2009; Chua, 2012) can better account for my interlocutors’ encounter with conservation and development interventions. Thus, this thesis contributes to anthropological approaches to sustainability and addressing entwined social and environmental transformations.

Particularly, I likewise extend studies on sustainability by addressing issues of materiality, temporality and mobility as they relate to theoretical discussions on potentiality and resilience. In doing so, I foreground the saliency of the sometimes neglected, but vital factors, in social relations, such as: surfaces, weather, and elemental substances such as water. However, as I emphasise in my thesis, such pervasive factors are not apolitical, but rather lend themselves to contestations, especially as they are implicated in people’s expansion of adaptive capacities. I have grounded such theoretical discussions in an analysis of Ifugao cosmology and current conservation and development initiatives in the province. In doing so, I make the case for scrutinising processes of categorisation, measurement and regulation in regards to resource governance.

As I suggest, understanding issues of well-being and social equity in regards

to sustainability requires a shift away from a preoccupation with stability and harmony. In Ifugao, local discourses concerning the entangled potential of humans, non-humans and places highlighted people's concern for the emergence and cultivation of multiple possibilities. How communities navigate these possibilities in ways that impact their adaptive capacities elicits an approach to sustainability that synthesises often segregated anthropological discussions. It is for this reason that I make the case for situating longstanding anthropological matters such as kinship and rituals, within timely global debates and questions regarding sustainability. As I underscore in the ethnographic accounts presented, an anthropology of sustainability must not simply address how communities are implicated in such debates. Just as significant is an exploration of how communities form their own inquiries and critiques on notions and practices of sustainability, through local discourses and via processes of deliberation and negotiation.

BIBLIOGRAPHY

- Abu-Lughod, L., 1991. Writing against culture. In: R. Fox, ed. *Recapturing anthropology: working in the present*. Santa Fe, NM: School of American Research Press, pp. 137-162.
- Acabado, S., 2010a. *The archaeology of the Ifugao agricultural terraces: antiquity and social organization*. University of Hawaii: PhD Thesis.
- 2010b. Landscapes and the archaeology of the Ifugao agricultural terraces: establishing antiquity and social organisation. *Hukay*, Volume 15, pp. 31-61. [Online] Available at: <http://journals.upd.edu.ph> [Accessed 16 April 2014].
- 2012a. Taro before rice terraces: implications of radiocarbon. *Senri Ethnological Studies*, Volume 78, pp. 285-305. [Online] Available at: <http://ir.minpaku.ac.jp> [Accessed 16 April 2014].
- 2012b. The Ifugao agricultural landscapes: agro-cultural complexes and the intensification debate. *Journal of Southeast Asian Studies*, 43(03), pp. 500-522. [Online] Available at: <http://journals.cambridge.org/SEA> [Accessed 10 July 2013].
- Adger, W.N., 2000. Social and ecological resilience: are they related? Progress in Human Geography, 24(3): pp.347-364. [Online] Available at: <http://phg.sagepub.com> [Accessed .7 February 2015].
- 2003. Governing natural resources: institutional adaptation and resilience. In: F. Berkhout, M. Leach and I. Scoones, eds. *Negotiating environmental change: new perspectives from Social Sciences*. Cheltenham: Edward Elgar Publishing Limited, pp. 193-208.
- Afable, P., 2011. Baguio's early 20th-century Japanese community: culture, society, and work in an American 'hill station' in the Philippines. In: K. Fujiwara and Y. Nagano, eds. *The Philippines and Japan in America's shadow*. Singapore: NUS, pp. 181-204.
- Agamben, G., 1999. *Potentialities: collected essays in philosophy*. Translated by: Daniel Heller-Roazen. Stanford: Stanford University Press
- Agoncillo, T., 1960. *Malolos: the crisis of the Republic*. Quezon City: University of the Philippines.
- Aguilar, F. J., 2013. Rice and magic: a cultural history from the precolonial world. *Philippine Studies: Historical and Ethnographic Viewpoints*, 61(3), pp. 297-330. [Online] Available at: <http://muse.jhu.edu> [Accessed 20 December 2013].
- Alejo, A., 2000. *Generating energies in Mount Apo: cultural politics in a contested environment*. Manila: Ateneo de Manila University Press.
- Allerton, C., 2009. Static crosses and working spirits: anti-syncretism and agricultural animism in Catholic West Flores. *Anthropological Forum: A Journal of Social Anthropology and Comparative Sociology*, 19(3), pp. 271-287.
- 2013. *Potent landscapes: place and mobility in Eastern Indonesia*. Honolulu, HI: University of Hawaii Press.
- Ananayo, Z., 2007. Rice Terrace Construction and Maintenance. *Nurturing Indigenous Knowledge Experts*. [Online] Available at: <http://nikeprogramme.org> [Accessed 31 July 2013].

- Appadurai, A., 2004. The capacity to aspire: culture and the terms of recognition. In: V. Rao and M. Walton, eds. *Culture and public action*. Stanford, CA: Stanford University Press, pp. 59-84.
- Ashden, 2009. *Case study summary: Save the Ifugao Terraces (SITMo), Philippines*. London: Ashden.
- Auge, M., 1995. *Non-places: introduction to an anthropology of supermodernity*. Translated by J. Howe. London: Verso.
- Baguilat, R., 1958. The Ifugao 'hagabi'. *Folklore Studies*, 17(1958), pp. 207-209. [Online] Available at: <http://www.jstor.org> [Accessed 04 April 2014].
- Barton, R., 1919. Ifugao law. *University of California Publications in American Archaeology and Ethnology*, 15(1), pp. 1-186.
- 1922. Ifugao economics. *University of California Publications in American Archaeology and Ethnology*, 15(5), pp. 385-446.
- 1941. Reflections in two kinship terms of the transition to endogamy. *American Anthropologist*, 43(4), pp. 540-549.
- 1946. The religion of the Ifugaos. *American Anthropologist New Series*, 48(4, Part 2, Memoirs of the American Anthropological Association. no. 65).
- 1955. *The mythology of the Ifugaos*. Philadelphia, PA: American Folklore Society.
- Baxstrom, R., 2013[2011]. Even governmentality begins as an image: institutional planning in Kuala Lumpur. In: S. Abram and G. Weszkalnys, eds. *Elusive promises: planning in the contemporary world*. New York: Berghahn Books, pp. 137-153.
- Beatty, A., 1999. *Varieties of Javanese religion: an anthropological account*. Cambridge: Cambridge University Press.
- Bellwood, P., 2005. *First farmers: the origins of agricultural societies*. Malden, MA: Blackwell.
- Berkhout, F., Leach, M. and Scoones, I., eds, 2003. *Negotiating environmental change: new perspectives from social science*. Cheltenham: Edward Elgar Publishing Limited.
- Beyer, H., 1955. *The origin and history of the Philippine Rice Terraces*. Quezon City, National Research Council of the Philippines.
- Beyer, H. and Barton, R., 1911. An Ifugao burial ceremony. *Philippine Journal of Science*, 6(5), pp. 227-252.
- Bhaskar, R., 2008. *Dialectic: the pulse of freedom*. London: Routledge.
- Bille, M., 2010. Introduction: An anthropology of absence. In: M. Bille, F. Hastrup and T. Sorensen, eds. *An anthropology of absence: materializations of transcendence and loss*. London: Springer, pp. 3-22.
- Bille, M., Hastrup, F. and Sorensen, T., eds, 2010. *An anthropology of absence: materializations of transcendence and loss*. London: Springer.
- Bloch, M., 1995. People into places: Zafimaniry concepts of clarity. In: E. Hirsch and M. O'Hanlon, eds. *The anthropology of landscape: perspectives on place and space*. Reprint ed. Oxford: Clarendon Press, pp. 63-77.
- Bornstein, E., 2003. *The spirit of development: Protestant NGOs, morality and economics in Zimbabwe*. London: Routledge.
- Bourdieu, P., 1977. *Outline of a theory of practice*. Translated by R. Nice. Cambridge: Cambridge University Press.

- 1999[1979]. *Distinction: a social critique of the judgement of taste*. Translated by R. Nice. London: Routledge.
- 2000. *Pascalian meditations*. Translated by R. Nice. Stanford: Stanford University Press.
- 2002[1986]. The forms of capital. In: N. Biggart, ed. *Readings in economic sociology*. Oxford: Blackwell, pp. 281-291.
- Boyd, E. and Folke, C., 2012. Adapting institutions, adaptive governance and complexity: an introduction. In: E. Boyd and C. Folke, eds. *Adapting institutions: governance, complexity and socio-ecological resilience*. Cambridge: Cambridge University Press, pp. 1-8.
- Brenneis, D., 2006. Reforming promise. In: A. Riles, ed. *Documents: artifacts of modern knowledge*. Ann Arbor, MI: University of Michigan Press, pp. 41-70.
- Brightman, M., 2012. Maps and clocks in Amazonia: the things of conversion and conservation. *Journal of Royal Anthropological Institute, New Series*, 18(3), pp. 554-571.
- Brosius, J.P., 1988. Significance and social being in Ifugao agricultural production. *Ethnology*, 27 (1), pp. 97-110. [Online] Available at: <http://www.jstor.org> [Accessed 15 December 2009].
- Buchmann, C., 2009. Cuban home gardens and their role in social-ecological resilience. *Human Ecology*, 37(6), pp. 705-721.
- Bryant, R., 2000. Politicized moral geographies: Debating biodiversity conservation and ancestral domain in Philippines. *Political Geography*, 19(6), pp. 673-705.
- Cabreza, V., 2014. *Projects threatening terraces halted*. [Online] Available at: <http://newsinfo.inquirer.net> [Accessed 6 August 2014].
- Cagat, K., 2010. A site of tensions: negotiating access and autonomy in the Rice Terraces of the Philippine Cordillera. School of Oriental and African Studies, University of London: MA Dissertation.
- 2013. A site of tensions: negotiating access and autonomy in the Ifugao Rice Terraces. *International Journal of Heritage and Sustainable Development*, 3(1), pp. 53-61. [Online] Available at: <http://ijhsd.greenlines-institute.org> [Accessed 30 September 2013].
- Caguan, A. and Joshi, R., 2002. *Golden apple snail pomacea spp. in the Philippines*. Los Banos, International Congress on Medical and Applied Malacology.
- Calderon, M., Bantayan, N., Dizon, J., Sajise, A., Codilan, A., and Salvador, M., eds, 2011. *Capacity for the conservation of the Ifugao Rice Terraces: the Hungduan farmers of Ifugao*, Los Banos: Southeast Asia Regional Center for Graduate Study and Research.
- Callon, M., Lascoumes, P. and Barthe, Y., 2009. *Acting in an uncertain world: an essay on technical democracy*. Translated by G. Burchell. Cambridge, MA: MIT Press.
- Callon, M., Law, J. and Rip, A. eds., 1986. *Mapping the dynamics of science and technology: sociology of science in the real world*. London: MacMillan.
- Carsten, J., 1997. *The heat of the hearth: the process of kinship in a Malay fishing community*. Oxford: Clarendon Press.
- Carsten, J. and Hugh-Jones, S. eds., 1995. *About the house: Lévi-Strauss and beyond*. Cambridge: Cambridge University Press.

- Carsten, J. and Hugh-Jones, S., 1995. Introduction: About the house - Lévi-Strauss and beyond. In: *About the house: Lévi-Strauss and beyond*. Cambridge: Cambridge University Press, pp. 1-46.
- Castro, J., 1983. *Epics of the Philippines (Anthology of ASEAN Literatures Vol 1a)*. Quezon City: APO Production Unit.
- Castro, N., 2000. Three years of the Indigenous Peoples Rights Act: its impact on indigenous communities. *KASARINLAN*, 15(2), pp. 35-54.
- Chau, A., 2006. *Miraculous response: doing popular religion in contemporary China*. Stanford, CA: Stanford University Press.
- Chua, L., 2012. *Christianity of culture: conversion, ethnic citizenship, and the matter of religion in Malaysian Borneo*. New York: Palgrave Macmillan.
- Clifford, J., 1997. Spatial practices: fieldwork, travel, and the disciplining of anthropology. In: A. Gupta and J. Ferguson, eds. *Anthropological locations: boundaries and grounds of a field science*. Berkeley, CA: University of California Press, pp. 185-222.
- Cochrane, L., 2013. Land, degradation, faith-based organizations, and sustainability in Senegal. *Culture, Agriculture, Food and Environment* 35(2): pp. 112-124. [Online] Available at: <http://onlinelibrary.wiley.com> [Accessed 31 January 2015].
- Condominas, G., 1972. Aspects of economics among the Mnong Gar of Vietnam: multiple money and the middleman. *Ethnology*, 11(3), pp. 202-219. [Online] Available at: <http://www.jstor.org> [Accessed 05 October 2012].
- 1977. *We have eaten the forest: the story of a Montagnard village in the central highlands of Vietnam*. Translated by A. Foulke. London: Allen Lane
- 1986. Ritual technology in Mnong Gar swidden agriculture. In: I. Norlund, S. Cederroth and I. Gerdin, eds. *Rice societies: Asian problems and prospects*. London: Curzon Press, pp. 28-46.
- Conklin, H., 1957. *Hanunoo agriculture: a report on an integral system of shifting cultivation in the Philippines*. Rome: Food and Agricultural Organization of the United Nations.
- 1974. Ethnographic research in Ifugao. In: J. Kuippers and R. McDermott, eds. *Fine description: ethnographic and linguistic essays*. New Haven, CT: Yale University Southeast Asia Studies, pp. 435-464.
- 1980. *Ethnographic atlas of Ifugao: a study of environment, culture, and society in Northern Luzon*. New Haven, CT: Yale University Press.
- Cooke, B. and Kothari, U., eds, 2001. *Participation: the new tyranny?* London: Zed Books.
- Cornwall, A., 2007. Buzzwords and fuzzwords: deconstructing development discourse. *Development in Practice*, 17(4-5), pp. 471-484. [Online] Available at: <http://www.jstor.org> [Accessed 04 August 2010].
- Corpuz, A., 2012. Namria turns over core and buffer zone maps of Ifugao Rice Terraces. *National Mapping and Resource Information Authority: Newscoop 2012*, 08 March, pp. 1-2.
- Crate, S., 2006. *Cows, kin, and globalization: an ethnography of sustainability*. Lanham, MD: AltaMira Press.
- Davies, C., 1999. *Reflexive ethnography: a guide to researching selves and others*. London: Routledge.

- de la Cruz, D., 2012. From the power of prayer to prayer power: on religion and revolt in the modern Philippines. In: L. Chua, J. Cook, N. Long and L. Wilson, eds. *Modern Anthropology of Southeast Asia: Southeast Asian perspectives on power*. New York: Routledge, pp. 165-180.
- de L'Estoile, B., 2014. "Money is good, but a friend is better": uncertainty, orientation to the future, and "the Economy". *Current Anthropology*, 55(S9), pp. 62-73.
- Department of Energy Philippines, 2004. *Guide on micro-hydropower development and rural electrification*, Manila: Department of Energy and Japan International Cooperation Agency.
- Derrida, J., 1976. *Of grammatology*. Translated by G. Spivak. Baltimore, MD: Johns Hopkins University Press.
- Dobson, A., 1998. *Justice and the environment: conceptions of environmental sustainability and theories of distributive justice*. Oxford: Oxford University Press.
- Dove, M., Sajise, P. and Doolittle, A., eds, 2011. *Beyond the sacred forest: complicating conservation in Southeast Asia*. Durham: Duke University Press.
- 2011. Changing ways of thinking about the relations between society and environment. In: M. Dove, P. Sajise and A. Doolittle, eds. *Beyond the sacred forest: complicating conservation in Southeast Asia*. Durham: Duke University Press, pp. 1-34.
- Dulawan, L., 2001. *Ifugao: culture and history*. Manila: National Commission for Culture and the Arts.
- Dulawan, M., 2005. *Oral literature of the Ifugao*. Manila: National Commission for Culture and the Arts.
- Dumia, M., 1979. *The Ifugao world*. Quezon City: New Day Publishers.
- e8, 2010. *The Philippine Ifugao-Ambangal Mini-hydro Project*, Montreal: e8.
- Eade, D., 2007. Capacity building: who build whose capacity?. *Development in Practice*, 17(4/5), pp. 630-639.
- Eder, J., 1982. No water in the terraces: agricultural stagnation and social change at Banaue, Ifugao. *Philippine Quarterly of Culture & Society*, Volume 10, pp. 101-116.
- Eder, J. and McKenna, T., 2004. Minorities in the Philippines: ancestral lands and autonomy in theory and practice. In: C. Duncan, ed. *Civilizing the margins: Southeast Asia government policies for the development of minorities*. Ithaca: Cornell University Press, pp. 56-85.
- Ellen, R., 2007. Introduction. In: R. Ellen, ed. *Modern crises and traditional strategies: local ecological knowledge in island Southeast Asia*. New York: Berghahn Books, pp. 1-45.
- Errington, S., 1987. Incestuous twins and the house societies of Insular Southeast Asia. *Cultural Anthropology*, 2(4), pp. 403-444. [Online] Available at: <http://www.jstor.org> [Accessed 01 September 2012].
- Fairhead, J. and Leach, M., 1998. *Reframing deforestation: global analyses and local realities: studies in West Africa*. London: Routledge.
- Finin, G., 2005. *The making of the Igorot: contours of Cordillera consciousness*. Quezon City: Ateneo de Manila University Press.
- Flores, C., 2008. Provision of renewable energy in Ifugao: micro-hydro in barangays Bangbang, Maggok and Bokiawan. *Community and Habitat, Journal on Rural Reconstruction*, Issue 13, pp. 113-132.

- Foucault, M., 1977. *Discipline and punish: the birth of the prison*. Translated by A. Sheridan. Second ed. New York: Vintage Books.
- Fowles, S., 2010. People without things. In: M. Bille, F. Hastrup and T. Sorensen, eds. *An anthropology of absence: materializations of transcendence and loss*. London: Springer, pp. 23-43.
- Frossard, D., 2005. In field or freezer?: some thoughts on genetic diversity maintenance in rice. In: M. Dove, P. Sajise and A. Doolittle, eds. *Conserving nature in culture: case studies from Southeast Asia*. New Haven, CT: Yale University Press Southeast Asia Studies, pp. 144-165.
- Gammeltoft, T., 2013. Potentiality and human temporality: haunting futures in Vietnamese pregnancy care. *Current Anthropology*, 54(S7): pp. 159-171. [Online] Available at: <http://www.jstor.org> [Accessed 19 January 2015].
- Garaway, C., 2006. Enhancement and entitlement – the impact of stocking on rural households' command over living aquatic resources: a case study from the Lao PDR. *Human Ecology*, 34(5), pp. 655-676.
- Geertz, C., 1957. Ritual and social change: a Javanese example. *American Anthropologist*, 59(1), pp. 32-54.
- 1980. *Negara: the theatre state in nineteenth-century Bali*. Princeton, NJ: Princeton University Press.
- Gell, A., 1992. The technology of enchantment and the enchantment of technology. In: J. Coote and A. Shelton, eds. *Anthropology, art and aesthetics*. Oxford : Clarendon Press, pp. 40-63.
- George, T., 1980. *Revolt in Mindanao: the rise of Islam in Philippine politics*. Kuala Lumpur: Oxford University Press.
- Goodman, N., 1978. *Ways of worldmaking*. Indianapolis, IN: Hackett.
- Gow, P., 1995. Land, people, and paper in Western Amazonia. In: E. Hirsch and M. O'Hanlon, eds. *The anthropology of landscape: perspectives on place and space*. Reprint ed. Oxford: Clarendon Press, pp. 43-62.
- Gregor, M., 1983. Baumgarten's "aesthetica". *The Review of Metaphysics*, 37(2), pp. 357-385. [Online] Available at: <http://www.jstor.org/> [Accessed 01 November 2013].
- Guerrero, R., 2002. Their impacts and management: invasive aquatic animals in the Philippines. *ASEAN Biodiversity*, October-December, pp. 12-15.
- Guimbatan, R., 2003. Terrace building systems and maintenance technology: indigenous approach vs. conventional approach. *First Review and Stakeholders' Workshop*. Banaue, Ifugao, 21-26 July 2003.
- Guimbatan, R. and Baguilat, T., 2006. Misunderstanding the notion of conservation in the Philippine rice terraces – cultural landscapes. *International Social Science Journal*, 58(187), pp. 59-67. [Online] Available at: <http://onlinelibrary.wiley.com> [Accessed 28 November 2009].
- Guyer, J., 2007. Prophecy and the near future: thoughts on macroeconomic, evangelical, and punctuated time. *American Ethnologist*, 34(3), pp. 409-421.
- Håkansson, N., 2014. World systems terraces: external exchange and the formation of landesque capital among the Ifugao, Philippines. In: N. Håkansson and M. Widren, eds. *Landesque capital: the historical ecology of enduring landscape modifications*. Walnut Creek, CA: Left Coast Press, Inc., pp. 98-116.

- Hall, D., Hirsch, P. and Li, T., 2011. *Powers of exclusion: land dilemmas in Southeast Asia*. Honolulu: University of Hawai'i Press.
- Hall, T., 2009. Footwork: moving and knowing in local space(s). *Qualitative Research*, 9(5), pp. 571-585. [Online] Available at: <http://qrj.sagepub.com> [Accessed 01 August 2013].
- Hanna, S. and Jentoft, S., 1996. Human use of the natural environment: an overview of social and economic dimensions. In: S. Hanna, C. Folke and K. Maler, eds. 1996. *Rights to nature: ecological, economic, cultural, and political principles of institutions for the environment*. Washington, D.C.:Island Press, pp. 35-55.
- Harkins, P., 1956. *Blackburn's headhunters*. London: Cassel.
- Harper, R., 1997. *Inside the IMF: an ethnography of documents, technology, and organizational action*. London: Academic Press.
- Harwell, E., 2011. The social life of boundaries: competing territorial claims and conservation planning in the Danau Sentarum Wildlife Researve, West Kalimantan, Indonesia. In: M. Dove, P. Sajise and A. Doolittle, eds. *Beyond the sacred forest: complicating conservation in Southeast Asia*. Durham: Duke University Press, pp. 180-215.
- Hastrup, K., 2013. Water and the configuration of social worlds: an anthropological perspective. *Journal of Water Resource and Protection*, 2013(5), pp. 59-66. [Online] Available at: <http://www.scrip.org> [Accessed 15 February 2015].
- Helmreich, S., 2011. Nature/Culture/Seawater. *American Anthropologist*, 113(1), pp. 132-144. [Online] <http://www.culanth.org> [Accessed 08 March 2015].
- 2013. Potential energy and the body electric: cardiac waves, brain waves, and the making of quantities into qualities. *Current Anthropology*, 54(S7), pp. 139-148. [Online] Available at: <http://www.jstor.org> [Accessed 19 January 2015].
- Hirsch, E., 1995. Landscape: between place and space. In: E. Hirsch and M. O'Hanlon, eds. *The anthropology of landscape: perspectives on place and space*. Reprint ed. Oxford: Clarendon Press, pp. 1-30.
- Hirtz, F., 1998. The discourse that silences: beneficiaries' ambivalence towards redistributive land reform in the Philippines. *Development and Change*, 29(2), pp. 247-275. [Online] Available at: <http://onlinelibrary.wiley.com> [Accessed 16 April 2014].
- Holling, C., 1973. Resilience and stability of ecological systems. *Annual Review of Ecology and Systematics*, 4(1973), pp. 1-23.
- Hoorn, M. v. d., 2009. *Indispensable eyesores: an anthropology of undesired buildings*. New York, NY: Berghahn Books.
- Howes, D., 2005 . Aestheticization takes command. In: *Empire of the senses: the sensual culture reader*. Oxford : Berg, pp. 245-250.
- Hubert, H. and Mauss, M., 1964. *Sacrifice: its nature and functions*. Translated by W. Halls. 1981 ed. Chicago, Ill: University of Chicago Press.
- Ifugao Provincial Government, 2004. *Ifugao Rice Terraces Master Plan 2003-2012*, Lagawe, Ifugao: Ifugao Provincial Government.
- Ignacio, A., de la Cruz, E., Emmanuel, J. and Toribio, H., 2004. *The forbidden book: the Philippine-American War in political cartoons*. San Francisco, CA: T'Boli Publishing and Distribution.

- Ileto, R., 1979. *Pasyon and revolution: popular movements in the Philippines, 1840-1910*. Manila: Ateneo de Manila University Press.
- 2011. Wars with the US and Japan, and the politics of history in the Philippines. In: K. Fujiwara and Y. Nagano, eds. *The Philippines and Japan in America's shadow*. Singapore: NUS Press.
- Ingold, T., 2000. *The perception of the environment: essays on livelihood, dwelling and skill*. London: Routledge.
- 2007. Earth, sky, wind, and weather. *Journal of the Royal Anthropological Institute, New Series*, 13(s1), pp. 19-38. [Online] Available at: <http://onlinelibrary.wiley.com> [Accessed 18 August 2010].
- 2010. Footprints through the weather-world: Walking, breathing, knowing. *Journal of the Royal Anthropological Institute, New Series*, 16(s1), pp. 121-139. [Online] Available at: <http://onlinelibrary.wiley.com> [Accessed 20 August 2010].
- Janowski, M., 1995. The hearth-group, the conjugal couple and the symbolism of the rice meal among the Kelabit of Sarawak. In: J. Carten and S. Hugh-Jones, eds. *About the house: Lévi-Strauss and beyond*. Cambridge: Cambridge University Press, pp. 84-104.
- 2007. Being 'big', being 'good': Feeding, kinship, potency and status among the Kelabit of Sarawak. In: M. Janowski and F. Kerlogue, eds. *Kinship and food in Southeast Asia*. Copenhagen: NIAS Press, pp. 93-120.
- Janssen, M., Schoon, M., Ke, W., and Börner, K., 2006. Scholarly networks on resilience, vulnerability and adaptation within the human dimensions of global environment change. *Global Environmental Change*, 16(3), pp. 240-252.
- Japan Consulting Institute, 2003. Feasibility study report on small-scale hydroelectric power development project at Ibulao basin in Republic of the Philippines. Tokyo: Japan Consulting Institute.
- Jefremovas, V., 2007. "Tradition" as innovation, adaptation, and continuity among the Sagada Igorots of Norther Luzon as exemplified by the Dangtey: notes on a ritual unique to Sagada Central. In: B. Tapang, ed. *Cordillera in June: essays celebrating June Prill-Brett, anthropologist*. Quezon City: The University of Philippines Press, pp. 62-89.
- Jenista, F., 1987. *The White Apos: American governors on the Cordillera Central*. Quezon City: New Day Publishers.
- Jiménez, A., 2003. On space as a capacity. *The Journal of the Royal Anthropological Institute*, 9(1): pp. 137-153. [Online] Available at: <http://www.jstor.org> [Accessed 06 December 2013].
- 2005. Changing scales and the scales of change: Ethnography and political economy in Antofagasta, Chile. *Critique of Anthropology*, 25(2), pp. 157-176.
- 2011. Trust in anthropology. *Anthropological Theory*, 11(2), pp. 177-196.
- Kajiwara, K., 1995. The myth of Yamashita treasure: its role in mutual perceptions. In: W. Villacorta and M. Carlos, eds. *Towards a shared future through mutual understanding: proceedings of the first International Conference on Philippine-Japan Relations*. Manila: De La Salle University Press, pp. 161-166.
- Keane, W., 2007. *Christian moderns: freedom and fetish in the mission encounter*. Berkeley: University of California Press.

- Keesing, F., 1962. *Ethnohistory of Northern Luzon*. Stanford, CA: Stanford University Press.
- Keesing, F. and Keesing, M., 1934. *Taming Philippine headhunters*. London: George Allen and Unwin Ltd.
- Kerkvliet, B., 1977. *The Huk Rebellion: a study of peasant revolt in the Philippines*. Lanham, MD: Rowman and Littlefield Publishers, Inc.
- 1990. *Everyday politics in the Philippines: class and status relations in a Central Luzon village*. 2002 ed. Lanham, MD: Rowman and Littlefield Publishers, Inc..
- Klock, J., 1995. Agricultural and forest policies of the American colonial regime in Ifugao territory, Luzon, Philippines, 1901-1945. *Philippine Quarterly of Culture and Society*, Volume 23, pp. 3-19.
- Küchler, S., 1993. Landscape and memory: the mapping process and its representation in Melanesian society. In: B. Bender, ed. *Landscape: Politics and perspective*. Oxford: Berg, pp. 85-106.
- 2002. *Malanggan: art, memory and sacrifice*. Oxford : Berg.
- Kwiatkowski, L., 1998. *Struggling with development: the politics of hunger and gender in the Philippines*. Boulder, CO: Westview Press.
- Lambrecht, F., 1929. Ifugaw villages and houses. *Catholic Anthropological Conference*, 1(3), pp. 117-141.
- 1957. The missionary as anthropologist: religious belief among the Ifugao. *Philippine Studies* 5(3), pp. 271-286.
- 1963. Adoption of Ifugao local customs in Christianity. *Saint Louis Quarterly*, 1(1), pp. 5-30.
- 1967. The hudhud of Dinulawan and Bagan at Gonhadan. *Saint Louis Quarterly*, Volume 5, pp. 267-713.
- Lansing, J., 1991. *Priests and programmers: technologies of power in the engineered landscape of Bali*. 2007 ed. Princeton, NJ: Princeton University Press.
- 2006. *Perfect order: recognizing complexity in Bali*. Princeton, NJ: Princeton University Press.
- Latour, B., 1986. Visualisation and cognition: Thinking with eyes and hands. In: H. Kuklick and E. Long, eds. *Knowledge and society: studies in the sociology of culture past and present: A research annual*. Greenwich: JAI Press, pp. 1-40.
- 1999. *Pandora's hope: essays on the reality of science studies*. Cambridge, MA: Harvard University Press.
- Leach, J., 2003. *Creative land: place and procreation on the Rai Coast of Papua New Guinea*. 2004 Paperback ed. New York: Berghahn Books.
- Leach, M., Mearns, R. and Scoones, I., 1999. Environmental entitlements: dynamics and institutions in community-based natural resource management. *World Development*, 27(2), pp. 225-247.
- Leach, M., ed., 2008: Re-framing resilience: a symposium report. STEPS Working Paper 13. Brighton: STEPS Centre.
- Lebel, L., Foran, T., Garden, P., and Manuta, J., 2009. Adaptation to climate change and social justice: Challenges for flood and disaster management in Thailand. In: F. Ludwig, P. Kabat, H. van Schaik, and M. van der Valk, eds. 2009. *Climate change adaptation in the water sector*. London: Earthscan, pp. 125-141.

- Leonen, M., 2007. Seeking the norm: reflections on land rights policy and indigenous peoples' rights. In: A. Gatmaytan, ed. *Negotiating autonomy: case studies on Philippine indigenous peoples' land rights*. Quezon City: Ateneo de Manila University Press, pp. 37-66.
- Leslie, P. and McCabe, J., 2013. Response diversity and resilience in social-ecological systems. *Current Anthropology*, 54(2), pp. 114-143.
- Lévi-Strauss, C., 1983. *The way of the masks*. Translated by S. Modelski. London: Thirty Bedford Square.
- Lewis, D. and Mosse, D., 2006. Theoretical approaches to brokerage and translation in development. In: *Brokers and translators: the ethnography of aid and agencies*. Bloomfield, CT: Kumarian Press, Inc, pp. 1-26.
- Li, T., 2005. Beyond 'the state' and failed schemes. *American Anthropologists*, 107(3), pp. 383-394. [Online] Available at: <http://onlinelibrary.wiley.com> [Accessed 17 January 2010].
- 2007. *Will to improve: governmentality, development, and the practice of politics*. Durham, NC: Duke University Press.
- 2014. *Land's end: capitalist relations on an indigenous frontier*. Durham, NC: Duke University Press.
- Love, B., 2013. Treasure hunts in rural Japan: place making at the limits of sustainability. *American Anthropologist*, 115(1), pp. 112-124.
- MacCannell, D., 1973. Staged authenticity: arrangements of social space in tourist settings. *The American Journal of Sociology*, 79(3), pp. 589-603. [Online] Available at: <http://www.jstor.org> [Accessed 15 June 2012].
- Maher, R., 1973. Archeological investigations in Central Ifugao. *Asian Perspectives*, 16(1), pp. 39-71.
- Maher, F. and K. Tetreault, 1993. Frames of positionality: constructing meaningful dialogues about gender and race. *Anthropological Quarterly*, 66(3): pp. 118-126. [Online] Available at: <http://www.jstor.org> [Accessed 22 January 2015].
- Manyena, S., 2006. The concept of resilience revisited. *Disaster*, 30(4), pp. 433-450.
- Marcus, G., 1995. Ethnography in/of the world system: the emergence of multi-sited ethnography. *Annual Review of Anthropology*, 24(1995), pp. 95-117. [Online] Available at: <http://www.jstor.org> [Accessed 16 April 2014].
- Mauss, M., 2003. *On prayer*. W. Pickering, ed. New York, NY: Durkheim Press/Berghahn Books.
- McKay, D., 2003. Cultivating new local future: remittance economies and land-use patterns in Ifugao, Philippines. *Journal of Southeast Asian Studies*, 34(2), pp. 285-306. [Online] Available at: <http://www.jstor.org> [Accessed 16 December 2009].
- 2006. Rethinking indigenous place: Igorot identity and locality in the Philippines. *The Australian Journal of Anthropology*, 17(3), pp. 291-306. [Online] Available at: <http://onlinelibrary.wiley.com> [Accessed 23 August 2010].
- 2010. A transnational pig: reconstituting kinship among Filipinos in Hong Kong. *The Asia Pacific Journal of Anthropology*, 11(3-4): pp. 330-344. [Online] Available at: <http://tandfonline.com> [Accessed 01 March 2015].
- 2012. *Global Filipinos: migrants' lives in the virtual village*. Bloomington, IN: Indiana University Press.

- McLeod, M., 1999. Indigenous peoples and the Vietnamese Revolution 1930-1975. *Journal of World History*, 10(2), pp. 353-389. [Online] Available at: <http://muse.jhu.edu> [Accessed 01 December 2013].
- Medina, C., 2000. *C.I.C.M missionaries and indigenous Filipinos (an essay in Anthropology of Religion)*. Baguio City: Saint Louis University, Codillera Research and Development Foundation, Inc..
- Meillassoux, C., 2005 [1978]. 'The economy' in agricultural self-sustaining societies: a preliminary analysis. In: D. Seddon, ed. *Relations of production: Marxist approaches to economic anthropology*. Oxford: Frank Cass and Company Limited, pp. 127-157.
- Minter, T., de Brabander, V., van der Ploeg, J., Persoon, G. and Sunderland, T., 2012. Whose consent? Hunter-gatherers and extractive industries in the Northeastern Philippines. *Society & Natural Resources: An International Journal*, 25(12), pp. 1241-1257. [Online] Available at: <http://www.tandfonline.com> [Accessed 16 March 2014].
- Mitchell, T., 2002. *Rule of experts: Egypt, techno-politics, modernity*. Berkeley, CA: University of California Press.
- Moore, H., 2011. *Still life: hopes, desires and satisfactions*. Cambridge, UK: Polity Press.
- Mosse, D., 2001. 'People's knowledge', participation and patronage: operations and representations in rural development. In: B. Cooke and U. Kothari, eds. *Participation: the new tyranny?* London: Zed Books, pp. 16-35.
- 2006. Anti-social anthropology? Objectivity, objection and the ethnography of public policy and professional communities. *Journal of the Royal Anthropological Institute (N.S.)*, 12(4), pp. 935-956.
- Municipality of Kiangnan, 1998. *Land use and development plan*, Kiangnan, Ifugao: Municipality of Kiangnan.
- 2011. *Comprehensive development plan*, Kiangnan, Ifugao: Municipality of Kiangnan.
- Nagacadan Barangay Council, 2005. *Barangay Ordinance No. 1, Series of 2005*. Kiangnan: Municipality of Kiangnan.
- National Commission for Culture and the Arts , 2008. *Japanese funds-in-trust for the safeguarding of Intangible Cultural Heritage: safeguarding and transmission of the hudhud chants of the Ifugao*, Manila: National Commission for Culture and the Arts .
- National Commission on Indigenous Peoples and Municipality of Hungduan, 2006. *Hungduan ancestral domain sustainable development and protection plan*, Lagawe, Ifugao: NCIP.
- 2010. *Hungduan ancestral domain sustainable development and protection plan*. Lagawe, Ifugao: National Commission on Indigenous Peoples.
- National Commission on Indigenous Peoples, 2006. *NCIP Administrative Order No. 01 The Free and Prior Informed Consent (FPIC) Guidelines of 2006*, Manila: National Commission on Indigenous Peoples.
- 2008a. *Minutes of the meeting July 19, 2008: Free Prior and Informed Consent process (consensus building) for the proposed Ambangal Mini-hydro Power Plant located at Ambangal Creek*, Lagawe: National Commission on Indigenous Peoples.

- 2008b. *Minutes of the meeting July 27, 2008: Free Prior and Informed Consent process (consensus building) for the proposed Ambangal Mini-hydro Power Plant located at Ambangal Creek*, Lagawe: National Commission on Indigenous Peoples.
- 2008c. *Minutes of the negotiation meeting and MOA [memorandum of agreement] signing on the proposed mini-hydro power project held at barangay Pindongan*, Lagawe: National Commission on Indigenous Peoples.
- 2012. *The revised guidelines on Free and Prior Informed Consent (FPIC) and related processes of 2012*, Manila: National Commission on Indigenous Peoples.
- Norie, A., 2010. *Dialectic and difference: dialectical critical realism and the grounds of justice*. London: Routledge.
- Novellino, D., 2007. Cycles of politics and cycles of nature: permanent crisis in the uplands of Palawan. In: R. Ellen, ed. *Modern crises and traditional strategies: local ecological knowledge in island Southeast Asia*. New York: Berghahn Books, pp. 185-219.
- Nozawa, C., Malingan, M., Plantilla, A. and Ong, J., 2008. Evolving culture, evolving landscapes: the Philippine rice terraces. In: T. Amend, J. Brown, A. Kothari, A. Phillips and S. Stolton, eds. *Values of protected landscapes and seascapes: protected landscapes and agrobiodiversity values*. Heidelberg: IUCN & GTZ, pp. 71-93.
- Okely, J., 2001. Visualism and landscape: looking and seeing in Normandy. *Ethnos*, 66(1), pp. 99-120.
- Orlove, B., and S. Caton, 2010. Water sustainability: anthropological approaches and prospects. *Annual Review of Anthropology*, 39, pp. 401-415. [Online] Available at: www.annualreviews.org [Accessed 08 March 2015].
- Pine, F., 2014. Migration as hope: space, time, and imagining the future. *Current Anthropology*, 55(S9), pp. 95-104.
- Presidential Decree No. 260, 1973. Manila: Ferdinand E. Marcos. [Online] Available at: <http://www.lawphil.net> [Accessed 31 August 2010].
- Presidential Decree No. 410, 1974. Manila: Ferdinand E. Marcos. [Online] Available at: <http://www.lawphil.net> [Accessed 31 August 2010].
- Presidential Decree No. 705, 1975. Manila: Ferdinand E. Marcos. [Online] Available at: <http://www.lawphil.net> [Accessed 31 August 2010].
- Presidential Decree No. 1501, 1978. Manila: Ferdinand E. Marcos. [Online] Available at: <http://www.lawphil.net> [Accessed 31 August 2010].
- Prill-Brett, J., 1994. Indigenous land rights and legal pluralism among Philippine Highlanders. *Law and Society Review*, 28(3), pp. 687-698.
- Retsikas, K., 2007. Being and place: movement, ancestors, and personhood in East Java, Indonesia. *Journal of the Royal Anthropological Institute*, 13(4), pp. 969-986. [Online] Available at: <http://onlinelibrary.wiley.com> [Accessed 25 Jan 2014].
- 2012. *Becoming: an anthropological approach to understandings of the person in Java*. London: Anthem Press.
- Rheinberger's, H.-J., 1997. *Towards a history of epistemic things: synthesizing proteins in the test tube*. Stanford: Stanford University Press.
- Ribot, J. and Peluso, N., 2003. A theory of access. *Rural Sociology*, 68(2), pp. 153-181.

- Robbins, J., 2007. Continuity thinking and the problem of Christian culture: belief, time and the Anthropology of Christianity. *Current Anthropology*, 48(1), pp.5-38. [Online] Available at: <http://www.jstor.org> [Accessed 25 March 2015].
- Rosaldo, M., 1980. *Knowledge and passion: Ilongot notions of self and social life*. 1993 ed. Cambridge: Cambridge University Press.
- Rosaldo, R., 1980. *Ilongot headhunting 1883-1974: a study in society and history*. Stanford: Stanford University Press.
- Sahlins, M., 1992. The economics of develop-man in the Pacific. In: J. Robbins and H. Wardlow, eds. *The making of global and local modernities in Melanesia*. Burlington, VT: Ashgate, pp. 23-42.
- 2009. The stranger-king or, elementary forms of the politics of life. *Indonesia and the Malay World*, 36(105), pp. 177-199. [Online] Available at: <http://www.tandfonline.com> [Accessed 12 December 2013].
- 2013. *What kinship is – and is not*. Chicago, IL: The University of Chicago Press.
- Sajor, E., 1998. Worlds apart: state policy on upland development and local transformations. In: K. Gaerlan, ed. *People, power and resources in everyday life: critical essays on the politics of environment in the Philippines*. Quezon City: Institute for Popular Democracy, pp. 135-186.
- Sartre, J., 1958. *Being and nothingness: an essay on phenomenological ontology*. Reprint of 1969 Methuen University Paperback ed. London: Routledge.
- Save the Ifugao Terraces Movement, 2008. *IMPACT: the effects of tourism on culture and the environment: Sustainable tourism and the preservation of the World Heritage Site of the Ifugao Rice Terraces, Philippines*. Bangkok: UNESCO Bangkok.
- Scoones, I., 2007. Sustainability. *Development in Practice*, 17(4/5), pp. 589-596.
- Scott, J., 1985. *Weapons of the weak: everyday forms of peasant resistance*. New Haven, CT: Yale University Press.
- 2009. *Art of not being governed : an anarchist history of upland Southeast Asia*. New Haven, CT: Yale University Press.
- Scott, W., 1974. *The discovery of the Igorots: Spanish contacts with the pagans of Northern Luzon*. Quezon City: New Day Publishers.
- 1975. *History on the Cordillera: collected writings on Mountain Province history*. Baguio City: Baguio Printing and Publishing Co., Inc..
- Staniukovich, M., 2000. Peacemaking ideology in a headhunting society: hudhud, women's epic of the Ifugao. In: P. Schweitzer, M. Bieseke and R. Hitchcock, eds. *Hunters and gatherers in the modern world: conflict, resistance, and self-determination*. New York, NY: Berghahn Books, pp. 399-409.
- Stewart, C. and Shaw, R., 1994. Introduction: problematizing syncretism. In: C. Stewart and R. Shaw, eds. *Syncretism/anti-syncretism: the politics of religious synthesis*. London: Routledge, pp. 1-26.
- Stone, M., 2003. Is sustainability for development anthropologists?. *Human Organization*, 62(2), pp. 93-99.
- Strang, V., 2004. *The meaning of water*. Oxford: Berg.
- 2008. The social construction of water. In B. David and J. Thomas, eds. *Handbook of landscape archaeology*. Walnut Creek, CA: Left Coast Press, Inc, pp. 123-130.

- 2009. *Gardening the world: agency, identity and the ownership of water*. New York: Berghahn Books.
- Strathern, M., 1991. *Partial connections*. Savage, MD: Rowman & Littlefield Publishers, Inc.
- 1995. *The relation: issues in complexity and scale*. Cambridge: Prickly Pear Press.
- 2000. The tyranny of transparency. *British Educational Research Journal*, 26(3), pp. 309-321. [Online] Available at: <http://www.jstor.org> [Accessed 29 April 2013].
- Taussig, K., Hoeyer, K. and Helmreich, S., 2013. The anthropology of potentiality in biomedicine: an introduction to Supplement 7. *Current Anthropology*, 54(S7), pp. S3-S14.
- Tejon, G., 1982. *Juan Villaverde O.P.: missionary and road builder 1841-1897*. Manila: University of Santo Tomas.
- The Indigenous People's Rights Act of 1997. (No. 8371), Manila: Senate and House Representatives of the Philippines. Available at: <http://www.lawphil.net> [Accessed 31 August 2010].
- The National Statistical Coordination Board, 2012. Facts and figures: Ifugao Province at a glance. [Online] Available at: http://www.nscb.gov.ph/rucar/fnf_ifugao.htm [Accessed 31 August 14].
- The Renewable Energy Act of 2008. (No. 9513), Manila: Senate and House Representatives of the Philippines. Available at: <http://www.lawphil.net> [Accessed 31 August 2010].
- Tokyo Electric Power Company, 2008a. *Feasibility study report volume 1: main report*, Lagawe: Tokyo Electric Power Company.
- 2008b. *Feasibility study report volume 2: environmental Impact Assessment Report*, Lagawe: Tokyo Electric Power Company.
- Trau, A., Ballard, C. and Wilson, M., 2012. Bafa Zon: localising World Heritage at Chief Roi Mata's Domain, Vanuatu. *International Journal of Heritage Studies*, 2012(iFirst), pp. 1-18. [Online] Available at: <http://www.tandfonline.com> [Accessed 16 May 2013].
- Tsing, A., 2005. *Friction: an ethnography of global connection*. Princeton, NJ: Princeton University Press.
- Turnbull, D., ed., 1989. *Maps are territories: science is an atlas: A Portfolio of Exhibits*. University of Chicago Press ed. Chicago, Ill and Victoria, Australia: University of Chicago Press.
- Umali, P., 2012. Shepherding FPIC processes. *Business Mirror*, 5 July, p. A6.
- United Nations Educational, Scientific and Cultural Organization/International Council on Monuments and Sites, 2011. *Report on the joint World Heritage Centre/ICOMOS Reactive Monitoring Mission to the Rice Terraces of the Philippine Cordilleras*, Paris: United Nations Educational, Scientific and Cultural Organization.
- United Nations Educational, Scientific and Cultural Organization, 1995. *World Heritage List: Rice Terraces of the Cordilleras, No 722*, Paris: United Nations Educational, Scientific and Cultural Organization. [Online]. Available at: <http://whc.unesco.org> [Accessed 20 December 2009].

- 2001. *Convention concerning the protection of the world cultural and natural heritage*, WHC-01/CONF.207/INF.5, Paris: United Nations Educational, Scientific and Cultural Organization. [Online]. Available at: <http://whc.unesco.org> [Accessed 20 December 2009].
 - 2002. *Convention concerning the protection of the world cultural and natural heritage*, WHC-02/CONF.202/18, Paris: United Nations Educational, Scientific and Cultural Organization. [Online]. Available at: <http://whc.unesco.org> [Accessed 20 December 2009].
 - 2005. *Convention concerning the protection of the world cultural and natural heritage*, WHC-05/29.COM/7A, Paris: United Nations Educational, Scientific and Cultural Organization. [Online]. Available at: <http://whc.unesco.org> [Accessed 20 December 2009].
 - 2006. *Convention concerning the protection of the world cultural and natural heritage*, WHC-06/30.COM/7A.Add, Paris: United Nations Educational, Scientific and Cultural Organization. [Online]. Available at: <http://whc.unesco.org> [Accessed 20 December 2009].
 - 2009. *Convention concerning the protection of the World Cultural and Natural Heritage*, WHC-09/33.COM/8B, Paris: United Nations Educational, Scientific and Cultural Organization. [Online]. Available at: <http://whc.unesco.org> [Accessed 20 December 2009].
 - 2011. *Convention concerning the protection of the world cultural and natural heritage*, WHC-11/35.COM/7A.Add, Paris: United Nations Educational, Scientific and Cultural Organization. [Online]. Available at: <http://whc.unesco.org> [Accessed 23 June 2012].
 - 2012a. *Convention concerning the protection of the world cultural and natural heritage*, WHC-12/36.COM/19, Paris: United Nations Educational, Scientific and Cultural Organization. [Online]. Available at: <http://whc.unesco.org> [Accessed 01 August 2014].
 - 2012b. *Convention concerning the protection of the world cultural and natural heritage*, WHC-12/36.COM/7A, Paris: United Nations Educational, Scientific and Cultural Organization. [Online]. Available at: <http://whc.unesco.org> [Accessed 08 January 2013].
 - 2012c. *Hudhud chants of the Ifugao*. [Online] Available at: <http://www.unesco.org> [Accessed 08 January 2013].
 - 2013a. *Convention concerning the protection of the world cultural and natural heritage*, WHC-13/37.COM/20, Paris: United Nations Educational, Scientific and Cultural Organization. [Online]. Available at: <http://whc.unesco.org> [Accessed 01 August 2014].
 - 2013b. *Rice Terraces of the Philippine Cordilleras*. [Online] Available at: <http://whc.unesco.org> [Accessed 3 December 2013].
- Viveiros de Castro, E., 2009. The gift and the given: three nano-essays on kinship and magic. In: S. Bramford and J. Leach, eds. *Kinship and beyond: the genealogical model reconsidered*. New York, NY: Berghahn Books, pp. 237-268.
- Volkman, T. A., 1985. *Feasts of honor: ritual and change in Toraja highlands*. Urbana: University of Illinois Press.

- Volunteer Services Overseas, 2010. *About VSO*. [Online] Available at: <http://www.vsointernational.org/about> [Accessed 3 August 2013].
- Voss, J., 1987. The politics of pork and the rituals of rice: redistributive feasting and commodity circulation in Northern Luzon, the Philippines. In: J. Clammer, ed. *Beyond the new economic anthropology*. New York, NY: St. Martin's Press, pp. 121-141.
- Walker, B., and Salt, D., 2006. *Resilience thinking: sustaining ecosystems and people in a changing world*. Washington, D.C.: Island Press.
- Walpole, P. and Annawi, D., 2011. *Where are indigenous peoples going? Review of the Indigenous Peoples Rights Act 1997 Philippines*, Kanagawa, Japan: Institute for Global Environmental Strategies.
- Werbner, R., 1994. Afterword. In: C. Stewart and R. Shaw, eds. *Syncretism/anti-Syncretism: the politics of religious synthesis*. London: Routledge, pp. 212-215.
- White, S., 1996. Depoliticising development: the uses and abuses of participation. *Development in Practice*, 6(1): pp. 6-15. [Online] Available at: <http://www.tandfonline.com> [Accessed 09 August 2014].
- Wiber, M.G., 1991. Levels of property rights, levels of law: a case study from the northern Philippines. *Man, New Series*, 26 (3), pp. 469-492. [Online] Available at: <http://www.jstor.org> [Accessed 11 December 2009]
- Widgren, M. and Håkansson, N., 2014. Landesque capital: what is the concept good for?. In: N. Håkansson and M. Widgren, eds. *Landesque capital: the historical ecology of enduring landscape modifications*. Walnut Creek, CA: Left Coast Press, pp. 9-30.
- Wiegele, K., 2004. *Investing in miracles: El Shaddai and the transformation of Popular Catholicism in the Philippines*. Honolulu, HI: University of Hawaii Press.
- Winichakul, T., 1994. *Siam mapped: a history of the geo-body of a nation*. Honolulu, HI: University of Hawaii Press.
- Wolters, W., 1983. *Politics, patronage and class conflict in Central Luzon*. Hague: Institute of Social Studies.
- Wood, D., 2010. *Rethinking the power of maps*. New York, NY: The Guildford Press.
- World Commission on Environment and Development, 1987. *Our common future: report of the World Commission on Environment and Development*. Oxford: Oxford University Press.